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From every man according to his ability: to every one according to his needs.

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GREAT PROBLEMS IN ORGANIZATION.

THE UNITED STATES POSTAL SERVICE.

BY CHARLES EMORY SMITH, POSTMASTER-GENERAL.

THE postal establishment of the United States is the greatest business concern in the world. It handles more pieces, employs more men, spends more money, brings more revenue, uses more agencies, reaches more homes, involves more details and touches more interests than any other human organization, public or private, governmental or corporate. These clauses are deliberately chosen. There are other nations that number more people. But there is none whose intercommunication, in area of sweep and magnitude of proportions, approaches the United States. Our postal system is the minute, intricate, all-pervasive ganglia, the ever-alert nerve-life, of the great people who are "the heirs of all the ages in the foremost files of time."

The postal service of England, France and Germany includes the telegraph, which is a private enterprise here, and yet the aggregate figures of the postal business in this country surpass both post and telegraph in any of those lands. There are great railroads, but there is no railroad whose volume of business matches that of the American post-office. There is one system, and only one in the world, of combined railroads that equals the receipts and expenditures of the postal service, but its only equality is in the sum of its business and not in the extent and ramifications of its organization.

The Post-Office Department directs 73,570 post-offices, musters an army of 200,000 employees, spends this year \$105,000,000 and counts receipts of

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PERRY S. HEATH,
FIRST ASSISTANT POSTMASTER-GENERAL.

nearly the same amount. It handled last year 6,214,447,000 pieces of mail-matter, of which 2,825,767,000 were letters, so that every minute confides 12,000 new messages to its hands. It manufactured and delivered postage-stamps to the number of 3,623,821,608, and the value of \$71,788,333. It carried 2,069,742,000 newspapers, some of them suggesting what Hamlet said to the ghost, "Thou comest in such a questionable shape."

The growth of the postal business is phenomenal. The figures just given are almost inconceivable. But when contrasted with the earlier figures they seem incredible as well. When Timothy Pickens served as Postmaster-General in Washington's administration, his balance-sheet of expenditures and receipts for a whole quarter of a year showed an aggregate of \$63,000, which is the expenditure of every six hours now. Even as late as 1880, the revenues and expenses were but little over a third of what they are this year. Within these eighteen years our population has increased about one-half, while the volume of the postal business has multiplied threefold.

The great development of the postal

service as we now see it in its advanced, if not perfected, state has come within a single generation. Thirty-five years ago there was no free delivery; now one-third of the people of the United States have their mail brought directly to their doors. A generation ago there was no such thing as the traveling post-office and no distribution upon the rail; every piece of mail, instead of going directly from the sender to the receiver, went to a central distributing office to be redistributed and recarried. In those days there was no uniform foreign postage, and every time a foreign letter was mailed the sender had to study a guide to find out what the postage was. There were no fast mails, no letter-carriers, no railway mail force, no special deliveries, and no money-order system which now transacts such an immense business. The inestimable improvements which have made the service what it is, and which excite the wonder and admiration of all who grasp its details, have all come within comparatively few years, and no development of our modern economic forces is more remarkable than the evolution of the splendid machinery which now maintains the intercourse of civilized society.

The general organization and methods,



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and some of the details, of this vast system will be of interest. The Post-Office Department is divided into four great bureaus, each under the immediate charge of an Assistant Postmaster-General. The general scope of each may be stated without being too technical or undertaking to be too minute and precise. The First Assistant's bureau deals with the practical administration of the post-offices, with their great clerical and carrier forces, and with all the multiplied questions of actual management. It supervises an annual expenditure of more than \$40,000,000. The bureau of the Second Assistant has the immense task of providing for the transportation of the mails. The yearly cost is \$35,000,000. That of the Third Assistant looks after the financial side, furnishes the stamps and keeps the accounts. The Fourth Assistant has charge of the appointment of 70,000

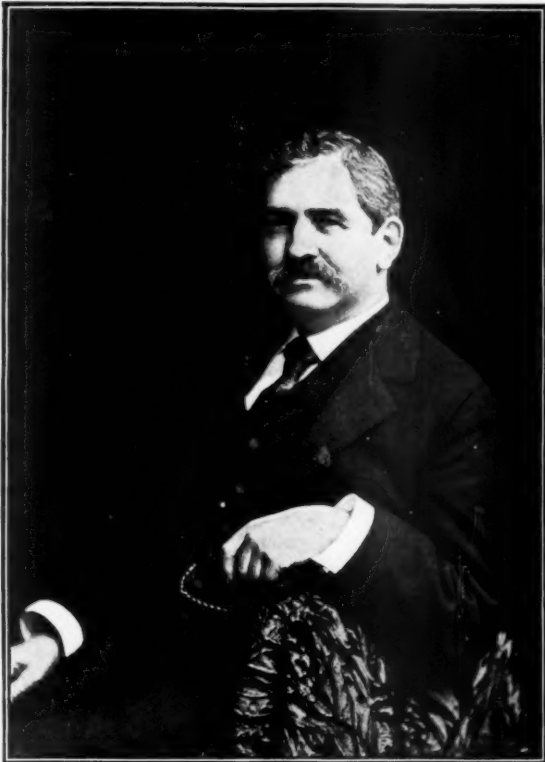
postmasters, and directs the force of inspectors. Besides these primary divisions of the Post-Office Department, there is the Auditor's office, with its 500 clerks, which is a bureau of the Treasury, and through which all post-office accounts must pass for scrutiny and audit.

The post-offices are of every rank, from that of New York, with its revenue of more than \$8,000,000, and its net profit

of more than \$5,000,000, to the little cross-roads office, the receipts of which do not exceed \$25. What are called presidential offices are those where the annual salary of the postmaster is not less than \$1,000, and in these cases the President makes the appointment. The number of such offices is over 3,800. The fourth-class offices, with salaries of less than \$1,000, where the appointment is nominally made by the Postmaster-General,

number nearly 70,000, and this figure sufficiently explains why it is impossible for any central authority to make the examinations necessary for selection, and why the practical choice must be left to local representatives, or an entirely different system adopted.

The delivery of the mails is the visible token to the individual. The delivery system has been carried to a high state of perfection. The city and borough resi-



CHARLES EMORY SMITH, POSTMASTER-GENERAL.

dents, who accept as a matter of course the visits of the alert and steadfast gray-coated messengers of the post-office from three to eight times a day, find it difficult to recall that prior to 1863 the letter-carrier service had no existence in the United States. Now it is represented by a compact army of 14,000 men, with a pay-roll of \$14,000,000 a year.

In a number of its features the serv-

ice is quite as hazardous as it is admirable. Take the marine service on the Great Lakes as shown at the mouth of the Detroit river. At that point, during the open season of eight months, a steamship passes every three and a half minutes day and night, the total tonnage exceeding that entering the ports of New York and Liverpool in a whole year. The flying delivery of mails to these "ships that pass in the night" has no parallel elsewhere. Every steamer is met and mail collected and delivered without even slowing up. Orders from headquarters, messages from home, letters written on the trip, the thousand and one communications to and from an enormous fleet moving in an ever-changing panorama, are all handled in this great exchange on the water. Letters are stamped on the back each with the name of the steamer it is intended for, in characters so large that they can be read by lamplight; they are inclosed in water-tight bags so that if the boat carrying them should be upset, the mails would float uninjured, and are hauled on board the passing vessels, while the return mails are received and an exchange is effected, without deviating from the course or slackening the speed.

Other notable innovations are the plac-



JOSEPH L. BRISTOW,
FOURTH ASSISTANT POSTMASTER-GENERAL.

ing of collection letter-boxes on street-cars, and the attachment of postal collection and distributing cars to the electric street lines—a service which within a few years has become quite general, and which has materially expedited local distribution. Until three years ago the free delivery system was limited to the cities and populous communities. Within that time the movement has been started to extend its advantages to the country districts. Under this plan routes have been laid through farming communities, sometimes stretching for a distance of twenty miles, on which delivery and collection are made from house to house. This rural delivery has been received with great favor, and is not unlikely to lead to a development which will cover the great majority of the homes in the land.

The railway post-office is the artery of the whole system. It was started in 1864, and the force of employees in this branch of the service alone now reaches more than 8,100. The number of miles of railroad covered by the service last year was 174,777, and the total mileage of the postal cars was 281,585,612. The growth in the handling of matter has been prodigious. In 1884 there were distributed in railway post-offices 4,519,661,900 pieces of mail; in 1890 the number had grown to 7,865,-



JOHN A. MERRITT,
THIRD ASSISTANT POSTMASTER-GENERAL.

434,101, and in 1898, to 12,225,706,-220. These figures almost defy the imagination, but they convey some idea of the amazing extent of this work. With this development the old system of distributing offices was abandoned. The mails are now handled, sorted, pouched and delivered in the postal car, and all the delay involved in sending to a distributing-point is avoided. For this service the most expert training and talent are required. The railway postal clerks must know every post-office in their whole range of territory as they know the alphabet; their memory within the necessary scope must be without flaw; and in throwing their letters to the right boxes across the car they become as expert as Herrmann in handling the cards upon the stage. Before entering upon the service, they are required to pass examinations which determine whether

they possess sufficient knowledge to enable them to distribute the mails correctly. They are required to memorize the entire scheme, and to submit to what are known as "case examinations," and unless they pass satisfactorily they are rigorously excluded. When this method of examination was instituted in 1872, the distribution averaged one error to every 720 letters. From that time onward the ratio of errors steadily declined until in 1884 it was found that 4,152 pieces were distributed correctly to every error made. Then, unfortunately, through change of administration, the personnel of the service was materially interfered with, and the ratio of errors increased until in 1888 it was one in every 3,694, and in 1890, one in every 2,834. Since that year the examination requirements have



NEW POST-OFFICE DEPARTMENT BUILDING AT WASHINGTON, TO BE OCCUPIED IN JULY, 1899.

been more stringently applied, and the enforcement of a stricter discipline and more exacting requirements has led to such improvement that at the present time only one error is made to every 10,428 pieces distributed correctly.

With the advance of the railway postal service have come fast mails. The department first required the railway companies to carry the postal cars on their fastest trains. This put the mails upon a par with the passengers. Then each railway post-office made up mails direct for other railway post-offices with which it connected and to which they were transferred without any intermediary. The next step was to establish exclusive mail-trains going faster than any passenger-train. These were

caught without slowing the trains, and intermediate points get the advantage of fast mails. Passengers cannot get on without trains stopping, but mails can. This train service, as can well be understood, is extra-hazardous, and has been illuminated by noble displays of heroism. Its dangerous character is illustrated in the fact that since 1889, 69 clerks have been killed and 1,324 injured by accidents while they were at their post of duty.

To reduce still further the time of the mails between the sender and the receiver, the department took up the question of anticipating local work and prearranging distribution in the principal cities by transferring city distributors directly to the railway-offices, where they separate the



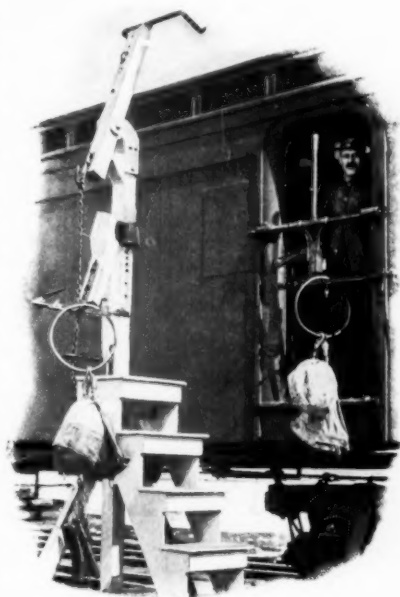
MAIL-BAG REPAIR-SHOP.

introduced on the main lines, and have been carried to the highest point of speed and efficiency. With the beginning of the present year the time of the fast mail between New York and San Francisco, steadily reduced from time to time, was again cut down, so that the mail now traverses the continent nearly four hours quicker than the fastest passenger-trains. As a part of this scheme, the new fast trains between Chicago and Omaha, running 500 miles in less than ten hours, and often reaching a speed of sixty to seventy miles an hour, have been the theme of widespread interest and comment. An important feature of the improved service is that by the catcher pouch service mail-bags are

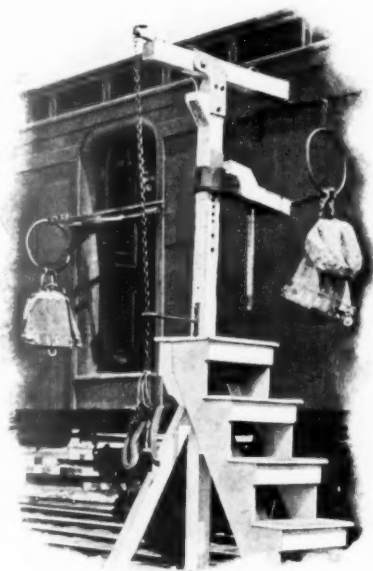
mails for carrier routes and branch offices, thus enabling them to be sent directly to the branch offices or placed in the hands of the carriers immediately upon arrival, without the delay of going through the central office. This system has proved very satisfactory in its practical operation, and has materially expedited delivery, and thus visibly promoted the general business interests of the country.

In connection with the transportation of the mails, it may be a matter of interest to know how the bags and pouches used in carrying the billions of pieces of mail-matter deposited in more than 80,000 post-offices and postal cars, are distributed, and how they find their way back. Practically

they are furnished under contract, and nearly all of them, after inspection, are fed into the service through the New York office. The great trend of the mail is from east to west, and from the large commercial centers to the less populous districts. How to recover the mail-bags sent to remote sections and have them promptly returned to the large distributing-points, long since became a serious problem. This was solved by designating certain cities, with adequate railroad facilities and ample storage-room, as depositories for all surplus mail-bags finding their way to offices in the surrounding states. The bags thus accumulated are forwarded to the seat of demand in their own territory, in addition to which two of the depositories—those at Cincinnati and St. Louis—are held in readiness to supply at frequent intervals from 5,000 to 20,000 pieces at a shipment. The repaired equipment flowing from the great repair-shop is another large factor in the scheme of distribution, and more than a million and a quarter of the repaired pouches and sacks are fed into the service through the offices at Washington, Baltimore, Philadelphia, New York and



MAIL CATCHER AND DELIVERER AFTER RECEIVING AND DELIVERING BAGS.



MAIL CATCHER AND DELIVERER BEFORE OPERATING.

Boston. The ebb and flow of this great tide run with the seasons, the outflow becoming very marked when the holiday demand sets in, terminating early in January, when the tide pours back into the several depositories, only to be drawn forth again with the general advertising period which extends well into the month of May.

In addition to the ordinary mail-bags so well known to the public, pouches and sacks of special design are used to meet unusual requirements. The mountain carrier who conveys the mail on foot through the difficult fastnesses, and the runner in the extreme Northwest who skims over his route on snow-shoes, need a peculiar style, and for their purposes a knapsack pouch is provided. The Alaskan carrier who travels through the snow-drifts and the gulches and over the uncut mountain road of an inhospitable and sparsely settled territory, needs still another style, which can be packed snugly and not burden or hamper the dog-team which is his means of transportation. Yet another form, unfamiliar except in remote and unsettled

sections, is the saddlebag pouch, comfortably carried by the horse-mail rider strapped to his saddle. The latest application of special equipment is a perforated pouch of new design to be used for mailing live queen-bees from the Pacific coast to remote islands of the ocean. Heretofore bees have been carried in ordinary sealed sacks with other mail-matter, and they can thus cross the Atlantic in perfect safety. But the voyage across the Pacific is so much longer that the bees are often suffocated, and the new device has been adopted to obviate this difficulty.

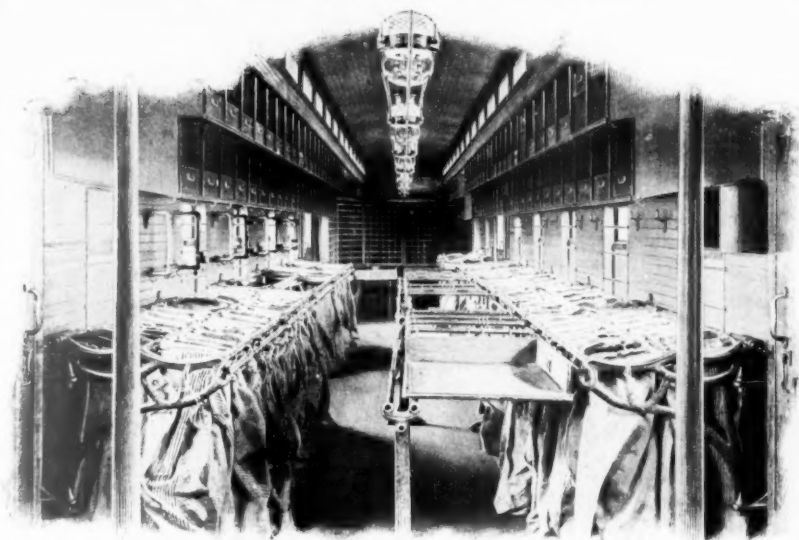
The "star routes" must not be overlooked. The term has gained a peculiar celebrity in post-office history. It is technical, if not fragrant, and originated in this manner. Prior to 1845, it was the practice of the department, in accepting bids for the transportation of inland mails on other than railroad and steamboat routes, to give preference to bidders who proposed stage or coach service. The act of Congress of March 3, 1845, abolished this rule and provided that it should be the duty of the Postmaster-General, in all future lettings of contracts of this character, to let to the lowest bidder tendering sufficient guarantees for faithful performance, without any condition except to provide for the due celerity, certainty and security of transportation. Bids for such service were thereafter classified as "celerity, certainty and security bids," from the distinguishing words of the statute; and, pre-

sumably for brevity, they were designated on the route registers by three stars (***), and came to be known as "star routes." The term afterward received official recognition and use in reports and in legislation. There are about 22,000 star routes in operation. For the purpose of making contracts for these, the country is divided into four general contract sections. These sections are taken in turn year by year, and all of the star and steamboat service is relet for a term of four years. At each one of these annual lettings between 5,000 and 6,000 contracts are awarded, and the competition is so sharp that the average number of bids received last year for each route was 41, the aggregate number being 218,000.

It is a curious fact that comparatively few of these star route contracts are awarded to persons living immediately on the routes themselves. There are a class of men known as "speculative bidders" who make a business of submitting bids on nearly all routes advertised by the department. They study the conditions prevailing in the different sections of the country, the cost of labor, stock and feed, the condition of roads, and obstacles to be overcome in performing the service; and, as there are many competitors, the effect is to make the prices very low, and it is often found that the bids of various speculative bidders on routes of considerable length differ by but a few cents. Many of these bidders will submit a bid on every route ad-



THE PRESENT POST-OFFICE DEPARTMENT BUILDING, WASHINGTON.



INTERIOR OF RAILWAY POSTAL CAR.

vertised under a general letting, to the number perhaps of 5,000, and in some cases one bidder may succeed in getting 1,000 or 1,200 contracts, while another may not succeed in getting one. It is a singular fact, also, which experience has demonstrated, that a local bidder will take service as a subcontractor for less than he will take it from the department for, and that the shrewd and speculative bidders successfully count on this characteristic in their enterprise. The star routes vary in length from a fraction of a mile up to several hundred miles, the longest one now in operation being that from Juneau, Alaska, via Circle in the same territory, along the Yukon river to Tanana, a distance of 1,618 miles, connecting at the last-named point with the next longest route, which runs from Tanana to St. Michaels, a distance of 900 miles.

The money-order division is one of the greatest of international clearing-houses. Through its machinery remittances may be sent all over the world at the smallest expense and in the safest manner. The number of money-orders issued last year was about 29,000,000, covering an amount in the aggregate of \$205,000,000. The adjustment of the accounts of this system is an undertaking of vast magnitude.

Three hundred and fifty clerks are constantly employed in nothing but adding the interminable columns of figures and testing their correctness. So close is the scrutiny maintained that in these transactions of over \$200,000,000 last year, the actual loss by fraud was only \$40. Great as this system is, it is yet only in its infancy. In many of its features our postal development is beyond anything seen elsewhere, but in the use of the money-order system we are far behind other nations. In Germany last year the number of orders issued was 100,000,000, and the aggregate amount \$1,800,000,000. In Great Britain the number issued was 75,000,000, and the amount \$310,000,000. The postal order has been far longer established in those countries, and there is little competition on the part of private enterprises, as here, nor do the operations of the system here embrace large classes of transactions which come within its scope in foreign lands.

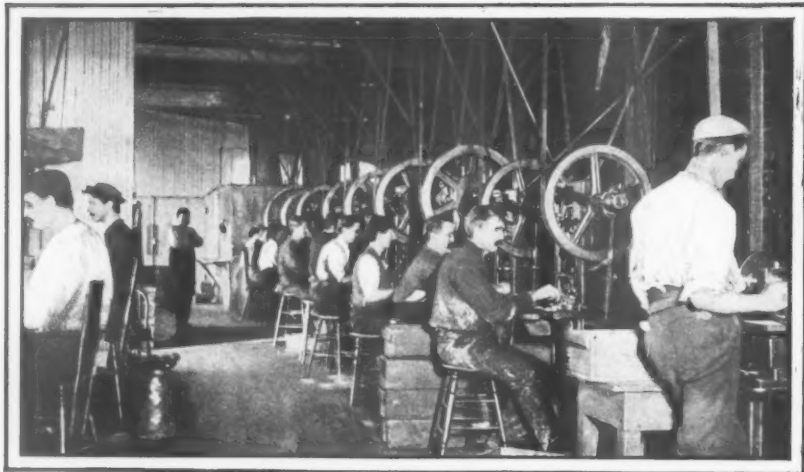
The dead-letter office is the safe and sacred depository of the secrets of a large proportion of the people. It opens, reads and returns to the writers, or forwards to the intended recipients, 20,000 misdirected, unaddressed or unclaimed letters for every business day of the year. Many of these

contain inclosures of value. The money, drafts, commercial paper and stamps thus found last year amounted to nearly \$1,000,000. The sacredness of correspondence is respected. No letter is opened until the ingenuity of the best experts is applied to deciphering the address. Last year there were nearly 50,000 letters and parcels without any address at all. The dead-letter office also intercepts fraudulent communications, and by the confiscation of unmailable articles becomes occasionally the unwilling custodian of a choice collection of live tarantulas and wriggling snakes, to say nothing of dynamite and other dangerous explosives.

The advance of the foreign mail service has kept pace, so far as the conditions would allow, with the domestic service. It is only since 1874 that the Postal Union has existed, which established uniform rates and conditions. Prior to that time the mails with foreign countries were regulated by separate treaties, providing differing rates with almost every nation. Then the letter-writer had to consult numerous schedules to learn how much he must prepay, and what conditions must be fulfilled to secure the earliest dispatch. Now, with the uniform foreign rate as well known as the domestic rate, he can drop his letter into the first box he comes to with the assurance that it will go by the quickest route to its destination, though at the ends of

the earth, even if he has forgotten to put a stamp on it, and that it will, if necessary, follow the person addressed around the globe, and if he cannot be found, finally return to the sender, all for the beggarly sum of five cents. The fastest steamers are used for the conveyance of the mails. No general contracts are made, but fixed rates are paid, and as soon as a new liner goes into commission the first question is the assignment of the mails to it. Within a few years the transatlantic service has been improved by the institution of sea post-offices upon three of the principal lines. The sea post-office is on the ocean what the railway postal car is on the land. The mails are assorted and distributed en route so that as soon as the steamer reaches port they may be put in the hands of letter-carriers for delivery or hurried to the first outgoing trains, without passing through the local post-office. In the harbor of New York the mail transfer-boat, "The Postmaster-General," meets the incoming steamers, receives their hundreds of tons of mail-matter and steams rapidly to the wharf, where fast trains wait to speed the already divided and assorted articles to their various destinations all over the country.

Within a short period, also, the parcels-post service has been instituted with sixteen countries and colonies in this

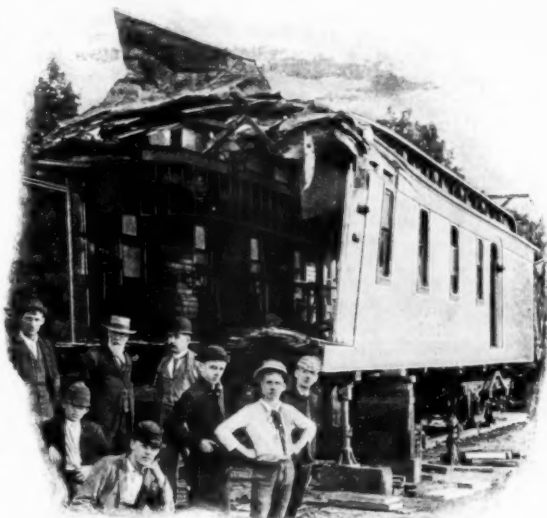


A CORNER OF THE MAIL-LOCK REPAIR-SHOP.

hemisphere, in which packages of merchandise, up to eleven pounds in weight, may be sent by mail either way at the minimum of cost. In European countries the parcels-post is also a domestic service, largely taking the place of express companies. Here the opposition has been sufficient to prevent its establishment, but the service is being steadily extended abroad with the prospect that before many years, in the offices of friendship and business, parcels may be exchanged with foreign countries almost as freely as they now pass between different localities in our own land.

All this vast and complicated business requires the utmost watchfulness to guard against wrongs. This vigilance is exercised through the inspectors. They are the eyes and ears of the department; they examine the offices; they travel and gather information; they investigate cases of fraud and depredation; they are on the alert against all the artful devices of swindling which seek the mails; from their lookout in the offices they watch and follow up suspicious movements. The rule of the department is that every money-order office shall be subjected to examination at least once a year, and as much oftener as possible. With more than 23,000 money-order offices, the work assumes great magnitude without regard to investigation of offenses against the law.

The system of checks in this enormous business is as vital as the original administrative machinery. The auditing office for the Post-Office Department is the largest accounting office in the world. It is under the control of the Sixth Auditor of the Treasury, and every transaction of the whole postal service must pass its examination. The immense proportions of this work and its multiplicity of detail can hardly be imagined. Five hundred clerks are constantly employed in it. Every one of the 73,000 post-offices makes a quarterly report; every expenditure of every kind



POSTAL CAR WRECKED AT NEW HAMBURG, N. Y.

must have its voucher; every payment of every sort must be verified; no payment of any sort can be made without authority of law; and thus every item and every figure in the million transactions must be subjected to the most minute and critical examination. The magnitude of the work will be appreciated from the fact that last year accounts and claims amounting to \$500,000,000 passed under this searching scrutiny.

The department must move with events at home and abroad. The past year has brought new responsibility. Expansion has governed the postal service. The mails go with the flag, whether trade does or not. When the arms and authority of the United States extended over Cuba, Porto Rico and the Philippines, it became necessary to take possession of the mail system in those islands and reconstruct it on American lines. In fact, it is very largely a new creation. The methods prevailing under Spanish rule were so antiquated, so fragmentary, so crude and disjointed, that the application of American ideas becomes more than a reorganization—it becomes a new development. A body of American experts has been sent to each of the new possessions to take charge of the work, and although the reconstruction has only just begun, a vast improvement has already been wrought in the mail

service. Under the old system the charge for postage, while nominally fixed, was in reality largely a matter of caprice with the agents; the mails were irregular and uncertain; there was no coherent, organized and unified system. Since the American occupation, registered letters have been found in the post-office at Havana which had lain there untouched for years. One of the first fruits of American administration was a saving of \$100,000 a year on a single line of transportation, and with rigorous care and

service covered only thickly settled sections, as in England or France or Germany, it would bring a splendid surplus. But the mail is carried to the remotest regions, and over the arduous passes of Alaska, where a two-cent stamp will take a letter even though it costs fifty cents or a dollar to deliver it. But the great source of the deficit is in the carriage of second-class matter, which is mailed at one cent a pound, while it costs the government eight cents a pound to transport it. For handling this class of mail last year the United



THE DEAD-LETTER OFFICE.

the faithful application of American principles there is fair promise that the postal service in Cuba, as well as in Porto Rico and the Philippines, will be made self-sustaining.

Why is it not self-sustaining in the United States? Because the government of the United States, representing the people, has chosen to be liberal, in some respects perhaps foolishly liberal, in carrying the written and printed communications of the people, rather than ask too closely whether it pays in a financial sense. If the postal

States paid above twenty millions more than it received. Wipe out the abuses that are connected with this branch of the service, and it would pay a magnificent profit.

Even with the errors of a system which was laid on broad educational lines, upon the theory of serving society in the most generous manner, the activity, energy and enlightenment of the American people are extending it in the most marvelous manner, and steadily advancing it to the self-sustaining point.

THE PRINCES OF TREBIZOND.

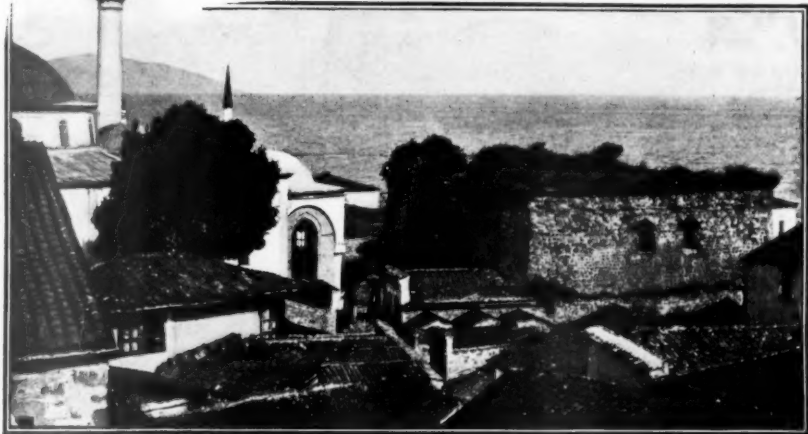
BY DULANY HUNTER.

THE lamp of history throws so faint a light upon the fallen empire of Trebizond that it seems to us more like a shadow than a reality, and yet the romance of its existence entitles it to a very different fate, for the story of its establishment, its duration and its downfall is one of the most remarkable legacies that we have inherited from the Middle Ages.

The fatal paralysis that had come over the Greeks at Constantinople at the beginning of the thirteenth century spared at least one member of the several imperial families then residing in that luxurious capital, and at the very moment when the scepter of the Eastern empire was about to fall from the nerveless hands of Alexius Angelus into the unholy keeping of the Crusaders, who had turned their arms against a Christian emperor, Alexius Comnenos, a youth scarcely twenty, but of powerful personality and heir to a name once been mighty, escaped enchantments of the fairest istence and, passing beyond en shadows through the entrance to the Euxine, out upon mysterious found upon their fabled shores an empire that after centuries of

existence was destined to fall and be entirely forgotten in that wide burial-ground of civilizations which we call the Ottoman empire.

There is something inspiring in the picture of the handsome Alexius, in the glory of youth and strength and courage, buckling on the heavy armor that had been torn by the infuriated populace of Constantinople from his grandfather, the hated tyrant Andronicus, and preparing to regain, almost single-handed, possession of the throne from which his ancestors had long ruled with such distinction that the very mention of the name of Comnenos awoke, in those days, recollections of grandeur. Every step in his march to fame excites our interest. He landed first upon the coast of Colchis, where, with the assistance of an aunt who had great influence in Georgia, and aided by the renown of his family, he collected a body of mercenaries and proceeded to Trebizond. On the frontier of the province in which this fair city is situated, his troops proclaimed him "the Faithful Emperor of the Romans"—the grand old Roman title to which the Byzantine emperors succeeded. He appeared before the gates of his future capital at the right moment, for the Trebizondeze were apprehensive of the



A GRASS-MANTLED FORTRESS.

Turks on the one side and of the Latins on the other; while no help could be expected of the fugitive Greek emperor at Nicæa. Alexius was received with open arms. His successes were dazzling. The Byzantine troops at Trebizond and the native Lazians passed to his standard, and in his energetic march along the shores of the Black sea as far as Sinope, he had only to appear before the important cities to be recognized as their sovereign. Mean-

while, his brother David had won the historic coast from Sinope to Heracleia, and proceeded inland in hope of conquering all the territory still held by the Greek Emperor at Nicæa. At this time the empire of Trebizond reached its farthest limits—westward from the snow-capped range of the Caucasus to the smiling shores of the Bosphorus; southward to the Lazistan mountains, a great barrier

which raises its giant breastworks to protect from invasion; in the north, the finest jewels of the crown shone out upon the Euxine—Trebizond, Kerasund, Gænoe, Sinope and Heracleia. In this richly dowered land, upon which nature had bestowed her choicest gifts of beauty, salubrity and plenty, there was a large, intelligent and industrious population, well worthy an emperor's pride.

But in a little while reverses came, and many of David's conquests were wrested from him before he was slain on the field of Sinope. Alexius alone, cut off from allies, surrounded by enemies, bent before the storm and made a treaty with the Turks by which he agreed to pay them tribute and to furnish troops for their army. The empire was now compressed between the Halys and the Phasis—its limits, with but slight variations, for the

whole period of its existence. For Alexius, realizing that the prosperity of his country depended upon its trade, no longer struggled for conquest, but employed the years remaining to him in preserving the old Byzantine laws and in improving the internal conditions of his empire.

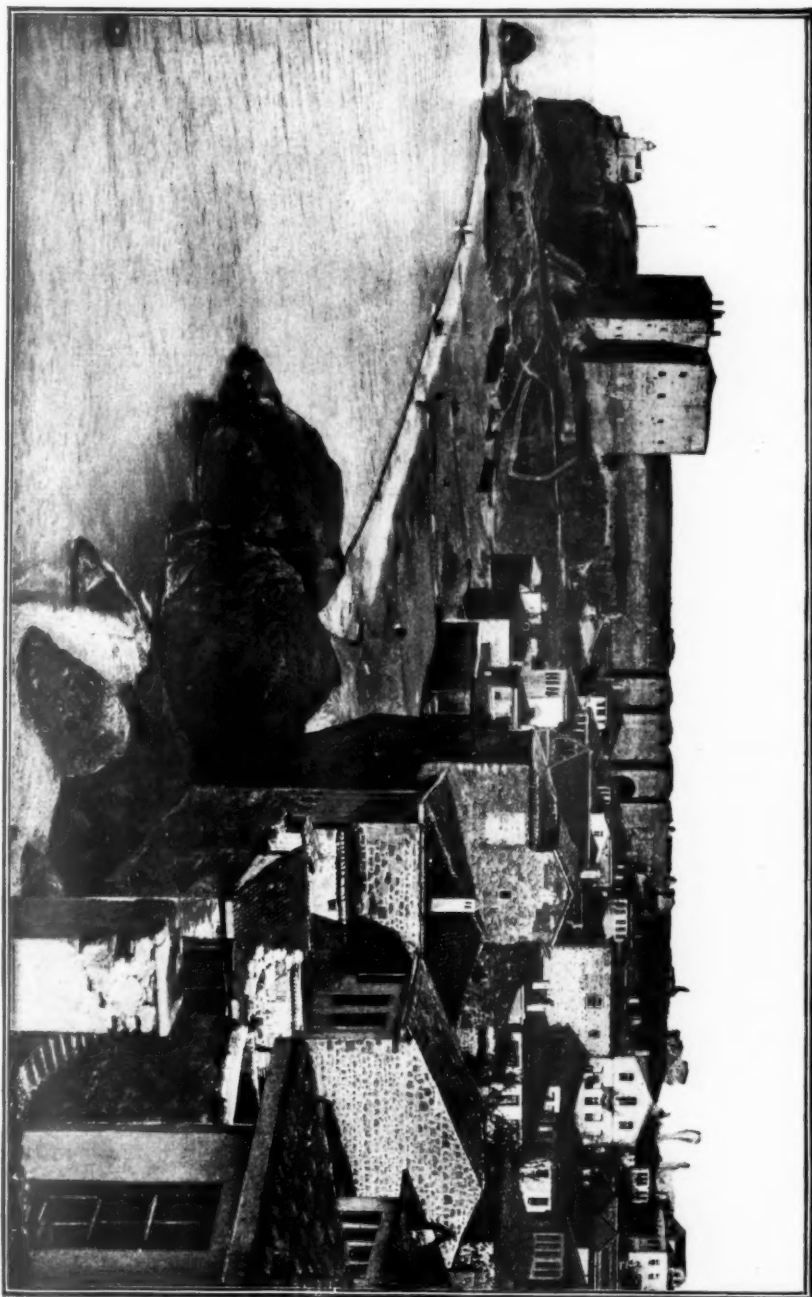
The city of Trebizond, its capital, had been for centuries the seaport of all the commerce of Central Asia.

Over seven

hundred years before Christ was born in the neighboring country of Syria, a colony of Greeks founded a settlement on the Euxine which prospered rapidly, and in the fifth century before Christ, became famous for the lavish hospitality it accorded to Xenophon and the heroic Ten Thousand. When it passed into the possession of the Romans, they strengthened and beautified it, and now Alexius, in turn, repaired the



THE MONASTERY OF SUMELA.



THE BEACH NEAR THE LIGHTHOUSE, TREBIZOND.



THE CITY OF TREBIZOND

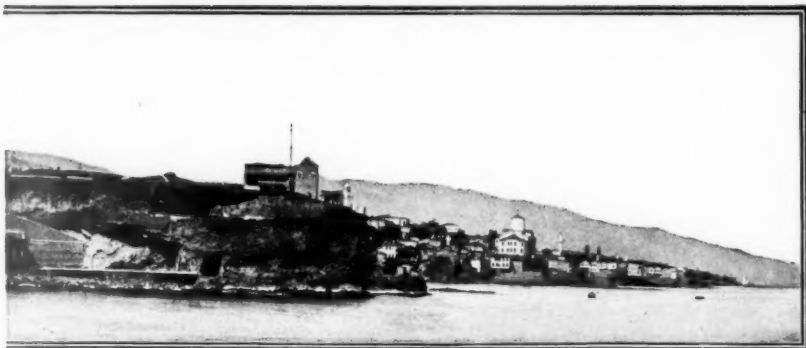
grand old Roman highways, strengthened anew the fortifications and added the crowning act to his popularity by building in honor of St. Eugenius, the patron saint of Trebizond, a magnificent church, whose history became linked with the fortunes of the empire. At the death of Alexius, Andronicus, his son-in-law, took the throne, and during the reign of this able statesman and soldier Trebizond was besieged by so powerful an army of the Grand Sultan that the empire seemed destined to premature destruction. Andronicus, learning of the great preparations that the Turks were making to overwhelm him, neglected nothing for the defense of his capital in the moment of its supreme danger, and led his army up the lofty mountain above the city to drive away the invaders, but they barely reached its summit when the sight of the vast hosts of the enemy so appalled them that they fled in all directions—to the woods, the city, the suburban churches—and left the Emperor with only a small body-guard to make a brave retreat. The enemy pressed on, and encamped near the city on the other side of the great ravines which lie to the east and west of Trebizond. The first attack was made from the north or seaward side, but it failed, and now all the energies of the besiegers were bent upon storming the upper citadel from the south. The attempt was made at night. Melik, the Sultan's son and commander-in-chief of his armies, issued forth from the sacred precincts of St. Eugenius, where he had established his harem. He was followed by a large division of his army, and from

opposite directions two other divisions came to assist in the assault. They were storming the grand old fortress and it was about to fall, when suddenly a tempest arose. St. Eugenius had not been deaf to the appeals for his intercession. Many of the cavalry were forced over the great precipices. Many of the infantry were hurled along the rapid torrents and swept into the sea. Then there came a calm and the besieged took advantage of it to make a sortie. The Turkish armies fled in confusion. The victory of Andronicus was complete.

A few years later, Trebizond was again the scene of a great excitement, but one of an altogether different nature. Andronicus was dead, and Joannes, son of Alexius, reigned in his stead. The hippodrome was deserted and crowds were gathered at the Tzoukanisterion to witness the spectacle of their Emperor and his nobles playing the royal game of tzoukanion. The spirited play carried the spectators to a high pitch of excitement, and they were applauding wildly, for the Emperor was displaying great dexterity at the game. Suddenly he was unhorsed, trampled upon in the confusion, and the awe-stricken crowds soon realized that he had been killed.

Manuel succeeded his brother Joannes, and for a quarter of a century upheld the imperial authority with such signal military ability that he is known to us as the "Great Captain."

But it was reserved for Georgius, Manuel's eldest son, to carry the prestige of the empire to its highest point. This ruler not only became absolutely independ-

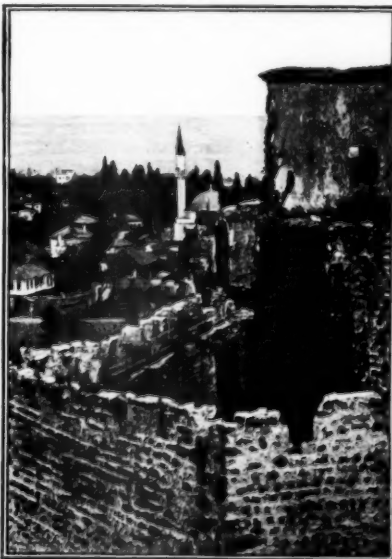


SEEN FROM THE SEA.

ent of his great neighbors, the Mongols and the Turks, but even undertook to drive the latter from the borders of his empire. Yet such was the fear his nobles had of his overshadowing authority, that they basely deserted him on one of his expeditions against the Turks, and left him to be taken prisoner by the enemy rather than see their own power weakened by his policy of centralization. Joannes II., his brother, entered on the vacant sovereignty, and almost immediately upon his accession a powerful party at Constantinople asked him, as head of the house of Comnenos, to be their champion in the struggle against the Emperor Michael Paleologos, who had forfeited their allegiance by uniting with the Latin Christians. A valiant man like Georgius would have most eagerly accepted such a tempting opportunity to win glory, and in all likelihood he would have led the Trebizantine armies to splendid victories, but, alas, he was then a prisoner, and Joannes was all unequal to the enterprise. Instead of appearing at Constantinople as the victorious leader of the orthodox Christians, about to reclaim the throne of his forefathers, this weak man went to that capital merely as a suppliant for the hand of the Emperor's daughter. The Emperor Michael did not welcome his imperial guest in person, for he had absented himself from his capital and delayed his return until Joannes not only had consented to appear before him shorn of imperial insignia—the purple boots, and gorgeous robes embroidered in double-headed eagles, indicative of his empire over both the East and the West—but had also agreed not to

resume them until the occasion of his marriage. Thus the Emperor of Trebizond exchanged the time-honored title of "Emperor of the Romans" for the less magnificent one of "Emperor of the East," and appeared henceforth with the eagles on his robes no longer crowned with double heads.

For all this loss of dignity, Joannes won his bride, and the eldest son of the union was Alexius II., who succeeded his father at the age of fifteen, and by his independent spirit soon proved himself a worthy representative of the proud house of Com-



RUINS OF THE CASTLE OF THE COMNENES.

nenos. By the will of Joannes the guardian of Alexius was the Emperor at Constantinople, who quickly exacted that his imperial ward should marry the daughter of a Byzantine noble; but this the young Emperor disdainfully refused to do, and in the very face of the preparations for the event married one of the lovely Georgian princesses, whose blood, mixing so often with that of the Emperors of Trebizond, was the undoubted cause of the great fame for beauty that the Comnenes enjoyed above all other royal families of their time, and in consequence of which their daughters were sought in marriage by the most powerful princes of the East.

Alexius by his valor and wisdom also

proress. But when the reins of government passed from the strong hands of Alexius II. to the feeble guidance of his son Andronicus, all the base passions of the nobles, which had been held in restraint, suddenly burst forth, and the whole empire was thrown into such a state of confusion and disorganization that for a score of years the capital was the scene of great disorder and violence.

Seven emperors and empresses after the days of Alexius II. passed up and down the steps of the throne in such rapid succession that we should not remember them if their histories were not too tragic to be forgotten. Each was blood-stained—some were the murderers, some the victims.

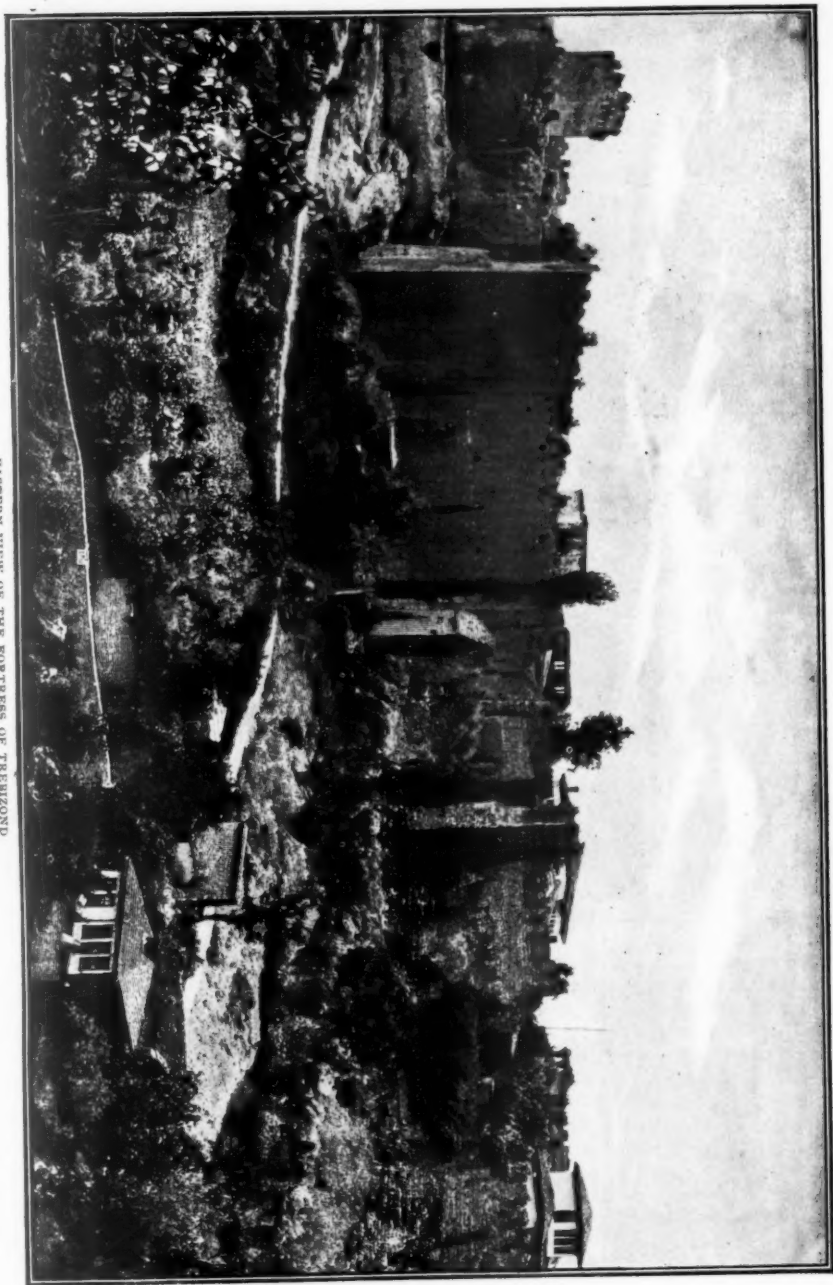


THE MOSQUE OF ST. SOPHIA.

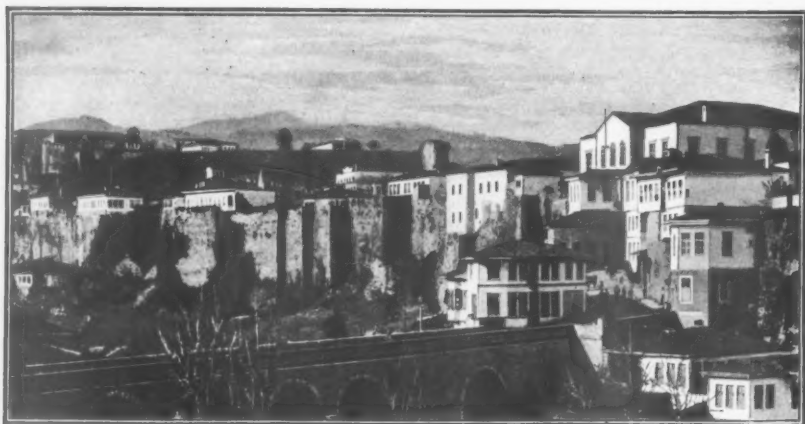
did much to rehabilitate the imperial reputation, which had been so degraded by Joannes. He gained a brilliant victory over the Turks early in his reign, and later, when the Genoese became a disturbing element of the foreign population at Trebizond, his firmness in dealing with them was worthy of the admirable traditions of his predecessors.

The life of the empire of Trebizond was of about two hundred and fifty years' duration. During the first half of this period its rulers, with the single exception of the weak Joannes, defended their dominions from the frequent attacks of their powerful neighbors with signal diplomatic skill and brilliant military

of their nearest relatives, while others met ignominious death at the hands of an infuriated populace. So passed out of history the legitimate descendants of the "Grand Comnenos," and Alexius III., natural son of the Emperor Basilus, came to the throne about the middle of the fourteenth century. All parties hastened to do him homage, each in the hope of consolidating its own power during his long minority, and of controlling him when he came to be an independent sovereign. But their efforts were in vain, as he proved himself an abler politician than they thought, for instead of being swayed by the rival factions of his unruly subjects, he used them so skilfully against one an-



EASTERN VIEW OF THE FORTRESS OF TREBIZOND



THE DABBAG HANE BRIDGE.

other that their power was soon crushed and the empire reduced to a state of order to which it had long been unaccustomed. Though an able ruler and a skilful politician, Alexius III. was, like most Greeks of his age, strikingly degenerate in military capacity, and in view of this deficiency his diplomatic talents are the more remarkable when we remember that through the greater part of his long reign of more than forty years his subjects enjoyed notable tranquillity and exceptional facilities for conducting their commerce, though they were entirely surrounded by the great Turkish hordes which were pushed onward by the force of an inexorable necessity to seize new lands for their increasing population. But it is not as a statesman that Alexius III. interests us chiefly. His magnificent patronage of the arts appeals to us even more strongly, and the churches and monasteries founded or restored by him are, though many are now in ruins, splendid evidence of the taste of his times and of his own liberality. First in picturesqueness of beauty as well as in excellence of preservation is the monastery of Sumela, situated about thirty miles from the city of Trebizond. It was rebuilt by him in 1360 and remains almost unchanged to this day, though it has been hanging from the great mountain's side for these many centuries with the dark fir forests solemnly pointing up to it from the wilderness of azaleas and rhododendrons that

covers the valleys hundreds of feet below. The chapel of the monastery is so deeply buried in the caverns that only its apse can be seen from outside, but it is lighted by crystal chandeliers and massive silver lamps which hang from the rocks and throw a glow of rare beauty over the rich frescoes and pictures adorning the walls, and at night this light shines so clearly through the little cluster of windows that it appears to the traveler in the distance like a splendid star. On the "Holy Mountain," just back of Trebizond, upon which there were more than a score of monasteries, the convent of the Panagia Theotocos, one of the most interesting remains of the empire, was richly endowed by him, and it was in the vestibule of the church attached to it that Alexius, his mother, and his empress were represented in life-size fresco paintings standing by the side of Christ and the Virgin. He also built a splendid church in honor of St. Eugenius to replace the magnificent one burnt, during the period of anarchy preceding his elevation to the throne, by the partisans of the Empress Irene, who attacked the party of the rebellious nobles intrenched within its sacred walls and in a few hours reduced to ashes the holiest and greatest monument of their country. But the monastery of St. Dionysius is the noblest of all the edifices built by Alexius, and the charter of its foundation, still to be seen among its archives, is the most precious relic now

remaining of the pictorial and calligraphic art of which the emperors of Trebizond were such munificent patrons.

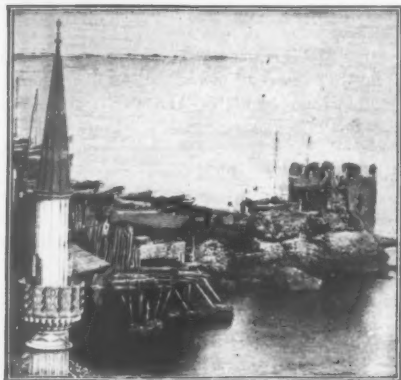
At the beginning of the fifteenth century, when the vast armies of the Mongols, led by the renowned Timor, swept, a mighty wave of desolation, over the continent of Asia, the empire of Trebizond was threatened with annihilation, but Manuel III., son of Alexius, who was then on the throne, hearing that they were hastening to overpower him, was politic enough to declare himself a vassal of the Tartars before they reached his territory, and to offer his services to the mighty conqueror, who was already making preparations for the brilliant victory he achieved a little later over the Ottoman Turks at Angora. Thus was delayed for the half of a century the

closing catastrophe in the history of the empire, whose population was spared from perhaps total extermination by the swords of a horde of barbarians only to meet a worse fate at the hands of the Turks in their marvelous career of conquest.

The empire's last years were inglorious. Each Emperor sank in pride and self-esteem lower than his predecessor. The last indication of ability shown by any of them was when Manuel secured the friendship of the Tartars, in consequence of which his long reign was peaceful. His son Alexius, who was responsible for his father's death, had his reign troubled by his own son Joannes, and was finally strangled by the latter's orders. While Joannes was on the tottering throne of Trebizond, Constantinople fell before the Turkish armies, but



CAVERN ENTRANCE OF THE THEOSKEPASTOR CONVENT.



A BIT OF THE WATER-FRONT.

the overthrow of the neighboring empire served as no warning to the vain and foolish prince, whom we find in the luxurious galleries of his palace idly dreaming of directing the expulsion of the Turks from Asia Minor at the very moment when the fanatic valor of the janizaries was startling Europe by its intensity and its unparalleled success. Joannes's splendid dreams of glory were rudely broken by the trumpeters of the enemy's army at his gates, calling upon him to acknowledge himself a vassal of their proud and virile young sovereign. Of course Joannes yielded, but he did not cease intriguing, and when the crown passed to his brother David, the last Emperor of Trebizond, that prince was not only unfortunate enough to reap the consequences of his predecessor's folly, but

vain enough to continue the same course of only half-concealed opposition to the powerful Sultan, the apostle of Moham-medanism, which for eight years had now reigned in St. Sophia.

The Turkish fleet held the city in blockade for a month, and the degraded Emperor finally rode out of the harbor of his former capital in unenviable security upon a splendid Turkish galley to continue a luxurious existence in Europe. Thenceforth the banners of the crescent were to wave in triumph from the lofty towers of Trebizond, her churches were to be turned into places of worship for the infidels and her children who refused to renounce their religion were to be driven from her walls forever. For years no Christian was allowed to enter the gates of the conquered city. The nobles were banished, their immense estates confiscated, their lovely daughters cast into Turkish harems and their sons obliged to become pages in the Sultan's palace or to enlist in the regiments of his janizaries. The fate of the middle classes was even more deplorable, for they passed into the most degraded slavery. The lower classes were driven into one of the suburbs, where they were allowed to eke out a miserable existence in full sight of the stronghold of their lost independence, and they had already touched the very depths of humiliation when the news was brought to them of the death of their former Emperor, and of the extinction of his dynasty by the inexorable Sultan.



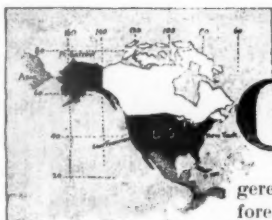
ENTRANCE TO THE MARKET.

ARCTIC PERILS



A STORY OF ADVENTURE AND DEATH IN THE
FAR NORTH.

BY MILTON E. AILES.



Of the 1897 whaling fleet, several ships lingered too long before making south with the others, and early in November the country was startled with the intelligence that two hundred and sixty-five human beings were confronted with starvation on the far-away, desolate coast of Arctic Alaska. Navigation for the year was closed and provisions could not be carried to them by sea. With commendable energy the government at once began the work of relief. The revenue cutter "Bear" had arrived at Seattle from her usual annual cruise only a short time before, but she was speedily loaded with provisions, and early in December sailed back with her brave officers and hardy crew to the north. Lieutenants Jarvis and Bertholf, and Dr. Call, the ship's surgeon, were landed December 15th, after a difficult voyage, at Cape Vancouver, more than one hundred miles to the south of the Yukon delta and fifteen hundred miles by land from Point Barrow. In a little over three months, or, to be precise, on the 29th of March, 1898, Lieutenant Jarvis and Dr. Call arrived at Point Barrow, having successfully made the long journey over the rugged country and through the polar night. Lieutenant Bertholf remained, in accordance with the plans of the party, at Point Hope, three hundred and fifty miles to the south of Point Barrow. On the way

these courageous and tireless officers had succeeded, with the assistance of kindly disposed Eskimos, in gathering a large herd of reindeer, which they drove to Point Barrow amid great hardships and trials. The aid thus brought to the ice-imprisoned men was a substantial assistance and addition to the rapidly decreasing store of provisions available for subsistence.

Almost from the time the whaling-vessels were frozen in the ice in the fall of 1897, until the arrival of Lieutenant Jarvis at Point Barrow, March 29, 1898, the salvation of the unfortunates aboard the ships depended upon the energies of one man, Charles D. Brower, who came to their rescue, kept them together, and fed and clothed them during that trying winter. Brower is only thirty-six years old, and yet he has lived fifteen years in Arctic Alaska. For the past six years he has been manager of the Cape Smythe Whaling and Trading Company, which has a station nine miles from Point Barrow. He was at his post when the whalers failed to escape from the ice. Several of the vessels were soon crushed by the tremendous pressure of the ice-pack, and Brower brought their crews to his home at Cape Smythe. The men on the ships which had not been wrecked were required to remain on board for lack of room on shore, but they were a care, nevertheless, for they, as well as those ashore, required to be sup-



CHARLES D. BROWER.

plied with food. Brower equipped native Eskimos with guns and ammunition from his stores, and sent them into the interior for deer. Others were sent fishing, and large quantities of both deer-meat and fish were thus obtained. He distributed his stores of clothing and provisions, originally intended for his own season's operations, among the ships and men, fixing a ration which he hoped would carry them over until navigation opened the following summer. When Lieutenant Jarvis arrived he turned the leadership over to him, and of the two hundred and sixty-five men only one man had been lost. He was frozen to death, having wandered away from the station.

It was indeed a fortunate thing for the

finished his business, he was preparing to return to Cape Smythe along the coast in a small boat, when the first vessel of the whaling fleet that year arrived—the "Navarch." She came steaming along the coast, following the ice as it drifted and opened to the north. The opportunity to return to Point Barrow on board of her was offered to Brower by the captain of the ship. He went aboard July 20, 1897. From this time on, the "Navarch" kept working her way slowly to the north, as the ice would allow. In his eagerness to be well forward, the captain of the "Navarch" permitted the ship to steam too far into the heavy ice. Instead of working again to the south, the vessel was



THE U. S. REVENUE CUTTER "BEAR."

whalers that such men as Brower live in that desolate country. When you have read this story you will marvel that he was there, for only a few weeks before he had passed through an experience which surpasses in intensity of suffering the hardship of the effort which Nansen and his brave comrade Johansen made to reach Franz - Josef Land on their way back from the farthest north.

Brower left his station in the spring of 1897 for Point Lay, one hundred and eighty miles to the south. His object was to trade with the natives there, and to examine into the feasibility of establishing a branch station at that place. Having

ordered to be tied to a piece of ground-ice near Icy cape, where it was hoped she might remain until the pack had moved farther north. By July 28th, however, the ice had so drifted in around the ship that she could not get out. The other ships could be seen making their way from the danger field by working south, and shortly they disappeared from sight.

It now turned out that the piece of ice to which the "Navarch" was anchored was not solidly grounded, and when the wind changed to offshore the whole mass moved out to sea. The situation was a perilous one, for there was imminent danger that the vessel would be crushed.

On August 23d they were somewhere off the Sea Horse islands. It was now decided to abandon the ship, as there was very little likelihood that she would ever get out. At the time, she was about fifteen miles from the edge of the pack. There was hope that by reaching the edge, three of the heavy boats could be launched and the other vessels of the fleet reached by open sea. There was encouragement for all because, while it is true the pack was drifting rapidly to the north, to the south could be seen the masts of the other ships. At 11 o'clock in the day, the captain and his wife and the crew of the "Navarch," in all forty-seven persons, left her side and began the weary struggle to reach the southern edge of the pack. Provisions in the way of hard bread and coffee had been placed in the boats, and material with which to mend those craft, for they would doubtless be badly injured before they could be launched in the water. The men were harnessed to the heavy whale-boats, and they dragged them over the rough ice until they were exhausted, when a stop was made for dinner, which consisted of bread and water. Three days and three nights they trudged to the edge of the pack. Always to the south could be seen the masts of the other ships, and this was the goal.

As they neared their destination, traveling became more dangerous and difficult. The ice on the edge of the pack was in constant motion, and the captain as soon as he heard the waters rushing along the edge of

the floe drew back and ordered all hands to return to the "Navarch."

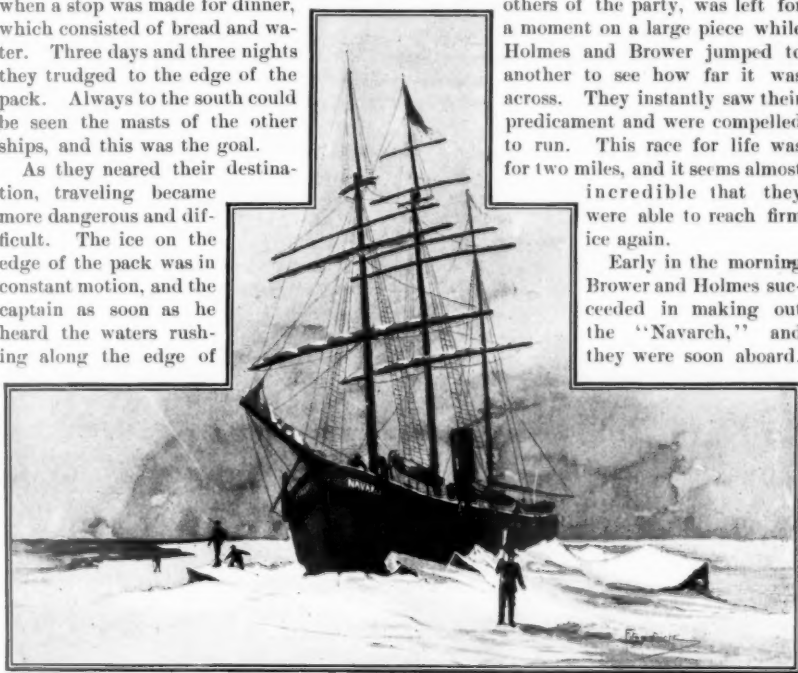
Worn, tired and discouraged, they began a retreat, and it was not long before two members of the party fell completely exhausted, one a man and the other a boy. A boat was abandoned because it was too heavy to pull and the exhausted people were placed in another, thus adding to the burden. It had rained most of the time since they had left the ship, but the weather clearing, they could just make out the top of her masts.

"Every man for himself" was the motto of the retreat, and even the captain's young wife had to get along as best she could. Brower and a young man named Holmes rendered her all the aid in their power.

When the struggling party got within eight miles of the ship, Brower and Holmes met with a fearful experience. They had come to a place where the ice was moving, although they were nowhere near the edge. If one steps on this ice, it is necessary to keep going or in a moment he will be underneath. The captain's wife, with

others of the party, was left for a moment on a large piece while Holmes and Brower jumped to another to see how far it was across. They instantly saw their predicament and were compelled to run. This race for life was for two miles, and it seems almost incredible that they were able to reach firm ice again.

Early in the morning Brower and Holmes succeeded in making out the "Navarch," and they were soon aboard.



STEAM-BARK "NAVARCH" IN THE ICE.

ARCTIC PERILS.



A POINT BARROW BELLE.

Some of the others had already arrived, among them the engineer and fireman. They got the boilers hot and started the whistle blowing as a guide to the others. At 10 o'clock the captain came aboard, and later his wife arrived with other stragglers. The following day, the two who had been abandoned succeeded in reaching the vessel's side. Some effort

was made to organize another party for a second attempt at reaching open water. Brower endeavored to have boats built covered with canvas, such light boats as were used at his whaling station. By building a wooden frame and covering it with canvas, a boat may be made which is so strong that it cannot be broken, and so light as to be easily carried over the ice. But the captain would not permit anything to be done. He seemed to be at his wits' end.

On the morning of September 10th there were decided evidences of pressure, and the danger then became so imminent that the captain again prepared to abandon the ship. Thirty-eight of the party readily obeyed the order, for, the weather being clear, masts could be seen in the distance off Cape Smythe, where, by this time, the revenue cutter "Bear," and the "William Baylis," a whaler, had arrived. At 12 o'clock on that day, thirty-eight of the crew left the side of the "Navarch," and nine remained aboard. Those who stayed with the ship rendered all possible assist-

ance in getting the party off, and they kept the whistle blowing as long as it seemed likely their companions were within hearing.

At the captain's request, Brower, because of his experience in traveling over the ice, now went ahead as leader. The party traveled as rapidly as the condition of the ice would permit during the afternoon, getting ever nearer and nearer to Brower's home at Cape Smythe, and they were encouraged to believe they would be saved.

Just at evening the edge of the pack was reached, and they were now only five miles off the point. Brower could see plainly the white-painted house which was his home, and the "Bear" and the "William Baylis" at anchor near the cape. Strenuous efforts were made to attract the attention of those aboard the ships and ashore. They shouted until their voices almost failed, and a rifle which they carried with them was fired again and again, but no one heard them. They were in despair as an evening fog arose and their only hopes—the ships and the station at Cape Smythe—were shut out from view. To add to their unhappy plight, it was learned that the captain, having again become disheartened, had, with seven others, retraced his steps toward the "Navarch," carrying the compass with him.

All this time, the pack, propelled by the wind and current, was moving rapidly to the north. Along the coast in the vicinity of Point Barrow there is a very swift current; it runs like a mill-race. No one knew better than Brower, who, by reason of his long residence at Point Barrow, was familiar with the conditions, that they were now to be carried out of the course



AN ESKIMO SUMMER VILLAGE.



A BECALMED WHALER.

of ships. It must be borne in mind that among the other vessels of the fleet there was no knowledge of the disaster which had befallen the "Navarch." It so happened that at this time on the other side of the point there was a second ice-pack. The wind and current combined soon brought the two packs together above the point somewhat in the shape of an inverted V. In a few hours the arms of this V closed together, and these thirty unfortunates were now in the center of a field larger by far than that upon which they had been first carried.

It is difficult to imagine a more trying situation. They were practically without food, for they had believed the opportunity for reaching the station was so favorable that they had made little provision for a prolonged stay on the ice. In fact, they had with them only a little hard bread in their pockets, except that some of them had taken a few cans of pine-apples, which were almost useless as nourishment. They did not try to husband their resources, and ate most of the hard bread on the first night. The next day, however, it was resolved to use as little of what remained as possible, and they determined to push their way south as rapidly as they could

in hope that they might still be able to make themselves seen.

It now rained almost continuously, and those who were clad in deerskin were the first to suffer. Deerskin is very susceptible to moisture, and becoming soaked it draws until the stitches are pulled out, when, there being nothing to hold the garments together, they drop to pieces. The party made but poor time to the south as they labored with heavy, wet clothing over the broken ice. The captain having taken the compass with him, they could travel only by the watch—that is, knowing at noon the sun bore due south and at midnight due north, they could, when they could see the sun, direct their steps always as they wished. It was wearisome and almost hopeless—this struggle toward the south. The weaker members of the party soon began to show signs of exhaustion.

On the second day after the bitter disappointment of passing Point Barrow without being discovered, the steward gave out. His occupation had unfitted him for hardships. He had been accustomed to a warm place, and could not stand great physical exertion. He could not compete with the more vigorous men in strug-

ARCTIC PERILS.



gling over the ice, and the constant falling down and getting up.

His "Good-by, my boys—leave me—I can go no farther!" was the pathetic announcement he made when he felt that his strength was completely gone.

Yet they encouraged him to struggle on and assisted him until it was no longer possible for him to walk. It was a hard thing to leave him behind, but they were compelled to do so. His case was the first of many, and what happened a little after was much more of a relief to them than that he should remain alone on the ice to die slowly of starvation. When he was out of sight behind a mass of ice, but not out of hearing, they heard a pistol-shot, and they knew that he had solved the problem for himself.

Travel as they would to the south, the pack was ever bearing them to the north. On the fourth day the food gave out entirely, although they had each eaten but a mouthful a day.

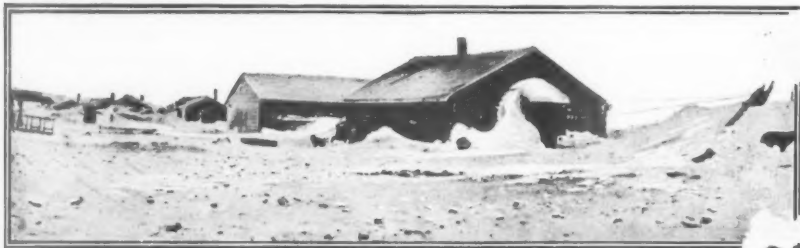
On the fifth day, when they had been twenty-four hours without food of any kind, it became evident that others of the party would have to be left behind.

The chief engineer had been making almost superhuman efforts to keep up, and his struggles culminated in delirium. He tottered along and seemed to be happy, as with joy in his face he talked of green fields. He visited in fancy the green meadows of his home in Michigan. His delirium had carried him in spirit all the way from that desolate field of ice back to his own home, and he chatted with his wife and children, who were there. It was but a short time until he became too weak to walk. His companions could not carry him—it was impossible to do so—and

he fell to the rear and was seen no more.

Four others were lost on the same day. The traveling had been hard, but they thought they could see clear water. There is a dark cloud called the "loom of the water" that overhangs wherever there is clear water in the Arctic. It beckoned them on and roused them to those extremes of effort which resulted in the dropping out of the chief engineer and the four others. One still strong had sprained his ankle and could go no farther. Another was a man only twenty-six years of age, apparently one of the strongest of the party. His spirit was gone, however, and while he seemed to be able to continue with his companions, he simply gave up and resolved to die where he was. He was not alone in complete despair, for one of the others persisted in going his own way, and despite all efforts wandered off alone. Toward evening the ice grew rougher, and another member of the party got to the point where he could not help himself, and they had to leave him on the ice.

The sixth day passed in the same weary effort to reach the south. On this day no one dropped to the rear. The following day, however, in the long struggle without food and with conditions getting ever and ever more difficult, the party suffered further diminution. Another cause for dropping out now began to have its effect. Their moccasins began to wear out at the soles, and their feet were cut by the sharp pieces of ice. The feet of those who were left behind on the seventh day were lacerated to such an extent that, with their weakness, they were unable to stand. With each it was the same heart-rending effort to continue. But when the morning of the eighth day came, there remained only eighteen of the thirty.



BROWER'S HOME AT CAPE SMYTHE.



TWILIGHT IN ARCTIC REGIONS.

By this time the survivors had drifted north and east of Point Barrow and were far from the usual course of ships. They had been eight days on the ice, exposed to the elements and without rest, four of which had been passed without any food at all, and on the first four days they had had only a mouthful each. As soon as they had absolutely nothing to eat, the pangs of hunger seemed not so great as when they had just a little. Afterward they found that a little piece of ice put in the mouth gave them some relief.

This day they reached the edge of the pack, and now they were in constant danger of drowning. To add to their misery, if that were possible, they were now carried more rapidly to the north than when they were in the solid mass, for the loose ice at the edge was constantly changing and moved more rapidly with the current than the floe which it accompanied. Early in the day the second engineer fell overboard while jumping from one cake to another. He was too weak to pull himself out. A member of the party jumped overboard twice to assist him, but could not. They had a small line which they attempted to wrap about him, but lost it in the effort, and he disappeared before their eyes.

One experience in their eight days' travel to the edge of the ice is worthy of mention, although it is not uncommon in Arctic regions. The second mate went snow-blind. He could otherwise make the efforts that were required of him, and he possessed,

fortunately, superb courage. He asked to be given hold of a line to enable him to travel with the others even if he fell down, and begged them not to desert him. They continued to assist him, although he was blind, until he got to the edge of the ice on the eighth day. Often he would fall into pools of water, but his strength of will kept him up until he arrived with the others. Snow-blindness starts with a smarting in the eyes, which become very much inflamed, and to open or close them causes intense pain. It is as if a red-hot iron were thrust into the sockets. The remedy is to bandage the eyes closed. The second mate delayed the party a good deal because of their efforts to assist him, but as long as he could travel they would not desert him.

One of the most pathetic cases was that



ONE OF THE WHALING-FLEET.

of a boy, who had traveled along with his stronger companions seven days. He became very weak, and yet, with the strength which courage gave him, struggled on. They assisted him until he could not go on. Then he would struggle for a few feet and fall down, and the party would wait for him until he had had a little rest. At last it was realized that he could no longer proceed. His boots were all gone, and no one had others to give him. His feet were swollen and bleeding from many cuts, and he was near to death from starvation and exposure. They were compelled to leave him alone on the ice or perish with him, and as the constantly decreasing band made their way onward they could hear his voice, gradually dying away, calling upon them not to leave him.

party, perverse because of his delirium, refused to join them on the cake until it was too late. The last they saw of him, he stood on a small cake of his own, drifting rapidly away in the Arctic sea.

If their situation had been desperate before, it was doubly so now. It seems almost beyond belief that the sixteen men who now remained of the original thirty could have voyaged safely four long days, as they did, on this little block of ice. It was only about twenty feet long by twelve feet wide, and if they had had the opportunity to make a choice of blocks they would probably have taken one which appeared more stable. Notwithstanding any moment might be their last now, they made preparation to attract the attention of people aboard ships if any should



HERD OF REINDEER.

Brower was still leader when they arrived at the edge of the pack. They were like a flock of sheep. If he had bid them turn back they would have started for the middle of the pack. Without him and the benefit of his knowledge and long experience it is probable that no one would ever have been able to more than guess what happened, during all these terrible days, to the party which left the "Navarch."

When at last the edge of the ice was reached, they eagerly scanned the sea for a sail. Here occurred a fortunate thing; the wind changed and the loose ice began to drift off from the floe. The cake of ice upon which they were huddled soon became detached and in a moment these suffering, unfortunate men were drifting. Just as it moved off, one member of the

fortunately come within sight. They had taken with them from the "Navarch" little poles which they used for vaulting over the rough ice. Three of these were lashed together, and by tying their shirts to them they set a signal of distress on the highest corner of their strange craft. And so on and on they drifted, growing ever weaker—glad, however, that no effort was now required of them. If, during these four days when they were at the mercy of the waves, they had been back again on the ice-pack and compelled to stagger along as they had been for the eight days which preceded them, not one member of the party would ever have lived to give an account of his sufferings.

During these four days they made some effort to obtain food. They shot three



PASSING POINT BARROW.

seals with the rifle, but it was summer-time, and as during that season the seals have not sufficient blubber to keep them afloat, they sank.

With all their shifting in and out among the large pieces of ice, the wind constantly drove them in toward the land, and into the path of ships near Cape Halkett, a hundred miles east of Point Barrow.

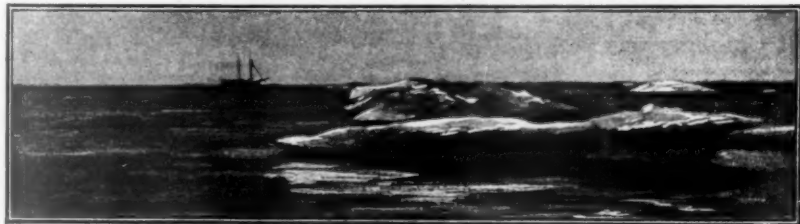
On the morning of the twelfth day after they had abandoned the "Navarch," they felt sure their deliverance had come. Only two miles away, the "Rosario" was discovered, apparently bearing down upon them. They raised their feeble voices, fired their rifle and waved their flag. No one can imagine how their hearts sank when all their efforts to attract attention failed.

The "Rosario" passed without seeing them. In the bitterness of disappointment, one member of the party fell face down upon the ice stricken with paralysis, and since that day has never uttered a word. After this bitter trial most of them began to fail rapidly. The weary hours passed and with each moment their hold upon life became feebler. But this *was* the day of deliverance. As evening began to fall (it is only a lessening of daylight at this season in the Arctic), a steam whaler, the "Thrasher," came lazily in from the direction of the Mackenzie river. Little effort was made by any member of the group to attract

attention. It so happened that a party of Siberian Eskimos were on board the ship. In looking over a sea of ice they are more keen-sighted than white men. They saw black specks on a block in the current, and took them to be a herd of walrus. The captain of the "Thrasher" brought his glasses to bear and made them out to be men. Then, with a full head of steam, the ship bore down upon those who were now at the very portal of the unknown world. Two boats were lowered and soon the unfortunates were aboard ship. Twelve of the sixteen survivors were found to be practically unconscious. Two were quite delirious, while Brower and his young companion, Holmes, the two who had been more accustomed to hardships than the others, were beginning to show the first signs of delirium.

The surviving whalers, after they had recovered from their terrible experience, were distributed among the whaling-ships off Point Barrow. Brower was returned to his home at Cape Smythe.

Within only a few weeks, as was told at the beginning of this article, it was given to Brower to help his fellow-men as it had been the privilege of others to help him in his terrible need. In fact, he had hardly had time to recover from his sufferings when the responsibility for the care of the ice-bound whalers was eagerly accepted by him.



THE AWAKENING.

BY COUNT LEO TOLSTOY.

XI.

NEKHLUDOFF'S life in the army, the war, new surroundings, new friends, all had helped him to forget Katusha. Once only, after the war was over, he went to see his aunts in the hope of meeting her, and heard the story. In fact, they told him she had quite gone to the bad. This made his heart ache. At first he thought of trying to find her and her child, but in the depths of his soul he felt so ashamed and pained when thinking of her that he did not make the necessary effort and tried to forget his sin. He had ceased to think of it until this strange coincidence brought it all back to him, and demanded the acknowledgment of a heartless, cruel cowardice. But he was far from such a confession, and his only fear was that everything might be found out, and that Katusha or her lawyer might tell the whole story and put him to shame before the world.

In this state of mind Nekhludoff sat by the jury-room window, smoking, while his companions made merry over the case, each taking a different view of its various aspects. The jolly merchant sympathized with all his heart in Smelkoff's way of spending his time.

"There, old fellow, that was something like! He knew what he was about."

The foreman seemed to set great store by the conclusions of the poison expert. From time to time Nekhludoff was asked questions, but he invariably answered in monosyllables and longed only to be left in peace.

When the usher with his sidling gait asked the jury back to the court, Nekhludoff was seized with fear, as if he were not going to judge but to be judged. He felt he was a scoundrel, who ought to be ashamed to look people in the face, yet by sheer habit he stepped on the platform and sat down, crossing his legs and playing with his pince-nez.

The prisoners were brought in again. Nekhludoff noticed that there were several

new-comers in court. They were the witnesses. They were asked their names, religion, et cetera, and after some consultation as to whether they should be sworn or not, the old priest came in again, dragging his legs with difficulty and arranging the golden cross on his breast. He now swore the witnesses and the expert in a quiet manner, again as if he were doing something useful and important.

The examination began. Once, when a point was brought out in favor of Maslova, she turned her eyes on the jury, and fixed them on Nekhludoff. Her face at once grew serious, and even severe. Terror seized the man, who could not take his look from those squinting eyes, showing bright, clear whites. "She has recognized me!" he thought, and shrank as if expecting a blow. But she had not recognized him. She sighed quietly, and turned her gaze upon the President. Nekhludoff also sighed. "O if it would only get on quicker!" he thought.

He felt what one feels when obliged to kill a wounded bird while out shooting—loathing and pity and vexation. The wounded bird struggles in the game-bag; the sportsman is disgusted and yet feels pity; he is in a hurry to kill the bird and forget it.

Such were the feelings that filled Nekhludoff's breast as he sat listening to the examination of the witnesses and longed for his ordeal to be over. But, just as if to spite him, the case was dragged out to a great length. After each witness had been examined separately, and the expert last of all, and a great number of useless questions put, with the usual air of importance, by the public prosecutor and both lawyers, the President invited the jury to examine the exhibits. These consisted of an enormous diamond ring, which, had evidently been worn on the first finger, and the test-tube in which poison from Smelkoff's stomach had been analyzed. These things had seals and labels attached to them.

Just as the witnesses were about to look at them, the public prosecutor arose and demanded that before they did this the

result of the doctor's examination of the body should be read. The President, who was hurrying the business through as fast as he could, in order to get to his Swiss girl, knew that the reading of this paper could have no other effect than that of producing weariness and putting off the dinner-hour, and that the public prosecutor wanted this report read simply because he knew he had a right to demand it. Nevertheless he gave his consent because he had no good pretext for refusing.

The secretary got out the doctor's report and read it in a weary, lisping voice, making no distinction between the r's and l's.

Four pages were covered with the twenty-seven paragraphs describing all the details of the external examination of the enormous, fat, swollen and decomposing body of the merchant who had been making merry in the town. The indefinite loathing that Nekhludoff felt was increased by the description of the corpse. Katusha's life, and the serum oozing from the body's nostrils, and the eyes that had come out of their sockets, and his own treatment of her, all appeared to belong to the same order of things, and he seemed surrounded and wholly absorbed by matters of the same nature.

When the reading of the report of the external examination was finished, the President heaved a sigh, and raised his head, hoping this unpleasant business was now finished, but the secretary at once went on to the description of the internal examination.

The reading of this report took a full hour, but it did not satisfy the public prosecutor, for when it had been read through, and the President turned to him, saying, "I suppose it would be superfluous to read the report of the examination of the internal organs?" the prosecutor answered, in a severe tone and without looking at the President, "I should like to have it read." He raised himself a little and showed by his manner that he had a right to have this report read, and would claim it. If it were not granted, there would be cause for appeal.

The member of the court for whose sake the recess had been taken, felt that he could not stand any further recital of these

revolting details. He turned to the President.

"What is the use of reading all this?" he said. "It is only dragging it out. These new brooms do not sweep clean; they only take a long while to do it."

The other member said nothing and looked gloomily in front of him.

In spite of the sick member's protest, the reading of the report began, but after a few lines the President whispered to one of the members, then stooped to the other, and having received their consent, said, "The court considers the reading of this report superfluous." The secretary stopped reading, and the public prosecutor angrily began writing something.

"The gentlemen of the jury may now examine the exhibits," said the President. The foreman and several of the others rose and went to the table, not quite knowing what to do with their hands. They looked in turn at the glass, the test-tube and the ring. The merchant even tried on the ring.

"Ah! that was a finger," he said, returning to his place. "About as big as a cucumber," he added. Evidently the image of the giant merchant that he had formed in his mind amused him.

XII.

When the examination of the exhibits was finished, the President announced that the investigation was now concluded, and without a pause, gave the word to the prosecutor, hoping that as the latter was a man, too, he also might feel inclined to smoke or dine, and would show some mercy on the rest. But the public prosecutor showed no mercy to himself or any one else. He was very stupid by nature. Besides this, he had the misfortune of having left school with a gold medal, and having received a reward at the university for his essay on "Servitude" when studying Roman jurisprudence, and was, therefore, self-confident and self-satisfied in the highest degree, which made him often appear extremely foolish.

When the word was given to him, he got up slowly, showing the whole of his graceful figure in its embroidered uniform. He put both hands on the desk, and slightly bowing his head, looked round the room,

avoiding the eyes of the prisoners. "Gentlemen of the jury!" he said, beginning to read the speech he had prepared while the reports were being read, "the business that now lies before you is, if I may say so, very characteristic.

"You see before you, gentlemen of the jury, a crime characteristic, if I may so express myself, of the end of our century, bearing, so to speak, the specific features of that very painful phenomenon, the corruption to which those elements of our present-day society, which are, so to say, particularly exposed to the burning rays of this process, are subject."

The public prosecutor spoke at great length, trying the while not to lose any of the threads of his discourse. His speech flowed on for an hour and a quarter without a break.

Only once he stopped, but soon mastered himself, and made up for the interruption by heightened eloquence. He would speak in tender, insinuating accents, looking at the jury, then in quiet, business-like tones, glancing into his note-book, and again with loud, accusing voice, looking from the audience to the lawyers. But he never looked at the prisoners, who were all three gazing fixedly at him. Every matter of moment then in vogue was alluded to in his speech—everything that then was and some things that still are considered to be the last words of scientific wisdom: the laws of heredity and inborn criminality, evolution and the struggle for existence, hypnotism and hypnotic influence.

According to his argument, the merchant Smelkoff was of the genuine Russian type, and had perished in consequence of his generous, trusting nature, having fallen into the hands of deeply degraded individuals.

Simeon Kartinkin was the atavistic production of serfdom, a stupid, ignorant, unprincipled man, who had not even any religion. Euphemia was a victim of heredity—all the signs of degeneration were noticeable in her. The chief wire-puller in this affair was Maslova, presenting the phenomenon of decadence in its lowest form. "This woman," he said, looking at her, "has, as we have to-day heard from witnesses in this court, received an education; she can not only read and

write, but she knows French. She is an orphan, and probably carries in her the germs of criminality. She was educated in an enlightened and noble family, and might have lived by honest work, but she deserts her benefactress, gives herself up to a life of degradation, and by exercising that mysterious quality lately investigated by science and known as hypnotic influence, she gets hold of this Russian, this kind-hearted Sadko,* and uses his trust in order first to rob, and then pitilessly to murder him."

"Well, he is piling it on now, isn't he?" said the President, bending toward the serious member with a smile.

"A fearful blockhead!" said the serious member.

Meanwhile, the public prosecutor went on with his speech: "Gentlemen of the jury"—gracefully swaying his body—"the fate of society is to a certain point in your power. Your verdict will influence it. Grasp the full meaning of this crime, the danger that awaits society from those whom I may, perhaps, be permitted to call pathological individuals such as Maslova. Guard it from infection; guard the innocent and strong elements of society from contagion or even destruction."

The sense of the speech, when divested of all its flowers of rhetoric, was that Maslova, having gained the merchant's confidence, had hypnotized him, and gone to his lodging with his key, meaning to take all the money herself, but having been caught in the act by Simeon and Euphemia, had had to share the booty with them. Then, in order to hide the traces of the crime, she had returned to the lodgings with the merchant and there poisoned him.

After the prosecutor had spoken, a middle-aged man in swallowtail coat and low-cut waistcoat, showing a large half-circle of starched white shirt, rose from the lawyers' bench and made a speech in defense of Kartinkin and Botchkova. He acquitted them both, and put all the blame on Maslova. He denied the truth of Maslova's statement that Botchkova and Kartinkin were with her when she took the money, laying great stress on the point that her evidence could not be accepted, as she was

* Sadko—the hero of a legend.

charged with poisoning. "The two thousand five hundred roubles could," the lawyer said, "have been easily earned by two honest people who got from three to five roubles per day in tips from the lodgers. The merchant's money was stolen by Maslova, and given away, or even lost, as she was not in a normal state. The poisoning was committed by Maslova alone." Therefore, he begged the jury to acquit Kartinkin and Botchkova of stealing the money, or if they could not acquit them of the theft, at least to admit that it was done without any participation in the poisoning.

In conclusion this lawyer remarked, to give the prosecuting attorney a good thrust: "The brilliant observations of the learned counsel on heredity, while explaining the scientific ideas of that theory, could hardly hold good in this case, as Botchkova is of unknown parentage."

Then Maslova's lawyer arose, and timidly and hesitatingly began his speech in her defense. Without denying that she had taken part in the stealing of the money, he insisted on the fact that she had had no intention of poisoning Smelkoff, but had given him the powder only to make him fall asleep. He tried to go in for a little eloquence in describing how Maslova was led into a life of debauchery by a man who remained unpunished while she had to bear all the weight of her fall, but this digression was unsuccessful and made everybody feel uncomfortable. When he muttered something about man's cruelty and woman's helplessness, the President tried to help him by asking him to keep closer to the facts of the case. After he had finished, the public prosecutor got up to reply. He defended his position against the first lawyer, saying that even if Botchkova was of unknown parentage, it did not invalidate the truths of heredity, since its laws were so far proved by science that we can not only deduce the crime from heredity, but heredity from the crime.

As to the statement made in defense of Maslova, that she had been the victim of an imaginary individual (he laid a particularly venomous stress on the word imaginary), he could only say that from the evidence, it was much more likely she had played the part of temptress to many and

many a victim who had fallen into her hands. Having said this, he sat down in triumph. Then the prisoners were given permission to speak in their own defense.

Euphemia Botchkova repeated once more that she knew nothing about it, and had taken part in nothing, and obstinately pointed out Maslova as the sole perpetrator of the crime. Simeon Kartinkin only repeated several times, "It is your business, but I am innocent—it's unjust." Maslova said nothing in her defense, and when the President repeated that she might do so, she only lifted her eyes to him, cast a look round the room like a hunted animal, and, dropping her head, began to cry aloud.

"What is the matter?" the merchant asked of Nekhludoff, hearing him utter a strange sound—the sound of weeping fiercely kept back. Nekhludoff did not yet understand the significance of his present position, and attributed the sobs he could hardly restrain and the tears that filled his eyes, to the weakness of his nerves. He put on his pince-nez in order to hide the tears, then got out his handkerchief and began blowing his nose.

The fear of the disgrace that would fall upon him if everybody in the court came to know about that incident of his past life, stifled the inner workings of his soul. This fear was at that moment stronger than all else.

XIII.

After the last words of the prisoners had been heard, the form in which the questions were to be put to the jury was settled. This also took some time, but at last was decided, and the President began summing up.

Before putting the case to the jury, he spoke to them for some time in a pleasant, plain manner, explaining that burglary was burglary, and that theft was theft, and that stealing from a place which was under lock and key was stealing from a place under lock and key. While he was explaining this, he looked several times at Nekhludoff, as if wishing to impress this important fact upon him in hope that, understanding it, Nekhludoff would make his fellow-jurymen also understand it. When he considered that the jury was sufficiently imbued with this truth, he proceeded to

enunciate another truth, namely that as murder is an action which has the death of a human being as its result, poisoning could be termed murder. When, according to his opinion, this truth had also been received by the jury, he went on to explain that if theft and murder had been committed at the same time, the combination of the crimes was theft with murder.

Although anxious to finish as soon as possible, the President was so carried away by his speech that, having begun to speak, he could not stop himself, and went on to impress on the jury with much detail—that if they found the prisoners guilty they would have the right to give a verdict of guilty, and if they found them not guilty, to give a verdict of not guilty, and if they found them guilty of one of the crimes and not of the other, they might give a verdict of guilty in the one case, and one of not guilty in the other. Then he explained that though this power was given them, they should use it with reason. He was going to add, that if they gave an affirmative answer to any question that was put to them, they would thereby affirm everything included in the question, so if they did not wish to affirm the whole of the question they should mention the part of the question they wished to except; but glancing at the clock and seeing it was five minutes to three, he resolved to trust to their being intelligent enough to understand this without further comment.

"The facts of this case are the following:" continued the President, and repeated all that had already been said several times by the lawyers, the public prosecutor and the witnesses. As the President was speaking the members on each side of him listened with attentive expressions, and looked from time to time at the clock, for they considered the speech too long, though very good. The public prosecutor, the lawyers, and, in fact, every one in the court, agreed with them. The President now summed up the case. He found it necessary to tell the jury what they all knew, or might have found out by reading—that is, how they were to consider the case, count the votes, and in case of a tie, to acquit the prisoners, and so on.

Everything seemed to have been told;

but no, the President could not forego his right of speaking just yet. It was so pleasant to hear the impressive tones of his own voice that he said a few words more about the importance of the power given to the jury, and how carefully they should use this power, and how they ought not to abuse it—about their being on their oath—that they were the conscience of society—that the secrecy of the jury-room should be considered sacred—et cetera, et cetera.

Maslova had looked at the President throughout his whole speech without removing her eyes, as if she feared losing a single word, so Nekhludoff was not afraid of meeting her gaze, and kept looking at her all the time. His mind was passing through those phases in which a face that we have not seen for many years first strikes us with the outward change, and then gradually becomes more and more like its old self, until we recognize the predominant expression of one exceptional, unique individuality. Yes, though dressed in a prison cloak, and despite the mature figure, despite a few wrinkles on the forehead and temples, and the swollen eyes, this was certainly the same Katusha who had once so innocently looked up to him whom she loved, with her fond, laughing eyes full of joy and life.

Nekhludoff felt the repulsiveness of what he had done, but he did not wish to believe that it was the effect of his deed that lay before him. From this idea, however, he could not get away, and all the while, in the depths of his soul, he felt the cruelty, cowardice and baseness, not only of this particular action of his, but of his whole self-willed, depraved, cruel, idle life, and that dreadful veil which had in some uncontrollable manner hidden his sin from him. The whole of his subsequent life was beginning to shake as he caught glimpses of what it covered.

XIV.

At last the President finished his speech, and lifting the list of questions with a graceful movement of his arm, handed it to the foreman, who came to take it. The jury got up and left, one after the other, glad to be able to get out into their room. As soon as the door was closed behind

them, a gendarme came up, pulled his sword out of the scabbard, and putting it to his shoulder stood just outside. The judges went away. The prisoners were led out. When the jury got to their room, the first thing they did was to take out their cigarettes and begin smoking. The sense of the unnaturalness and falseness of their position passed away when they left the court-room. They settled down with a feeling of relief, starting at once an animated conversation.

"Tisn't the girl's fault. She got muddled up," said the kindly merchant. "We must recommend her to mercy."

"That's just what we must consider," said the foreman—"we must not give way to our personal impressions."

"The President's summing up was good," remarked the colonel.

"Good? Why, it nearly sent me to sleep."

"The chief point is that the servants could have known nothing about the money if Maslova had not been in accord with them," said the clerk of Jewish extraction.

"Well, do you think that it was she who stole the money?" asked one of the jury.

"I will never believe it," cried the kindly merchant; "it was all the other one's doing."

"They are a nice lot, all of them," said the colonel.

"But she says she never went into the room."

"The girl had the key," said the colonel.

"What if she had?" retorted the merchant.

"The question is," put in Peter Gerasimovitch, "whether the girl was the instigator and inciter in this affair, or the servants."

"The servants couldn't have done it alone—she had the key."

Random talk of this kind went on for some time. Then the foreman said: "I beg your pardon, gentlemen, but had we not better take our places at the table and discuss the matter? Come, please," and he took the chair.

The questions were expressed in the following manner:—

"1. Is the peasant of the village Borki, Krapivineckia district, Simeon Petrovitch Kartinkin, thirty-three years of age, guilty of having, in accordance with other persons, given the merchant Smelkoff, on the 17th of January, 188—, in the town of N—, poisoned brandy, with intent to deprive him of life, and the object of robbing him, which caused Smelkoff's death, and there having stolen from him about two thousand five hundred roubles in money and a diamond ring?"

"2. Is the mezhanka Euphemia Ivanovna Botchkova, forty-three years of age, guilty of the poisoning described above?"

"3. Is the mezhanka Katerina Michailova Maslova, twenty-seven years of age, guilty of the crimes described in the first question?"

"4. If the prisoner Euphemia Botchkova is not guilty according to the first question, is she not guilty of having on the 17th of January, 188—, in the town of N—, while in service at the Hotel Mauritania, stolen out of a locked portmanteau belonging to the merchant Smelkoff, a lodger in that hotel, which was in the room occupied by him, two thousand five hundred roubles, for which object she unlocked the portmanteau with a key she brought and fitted to the lock?"

The foreman read the first question.

"Well, gentlemen, what do you think?"

This question was quickly answered. All, with one exception, agreed to say "Guilty," convinced that Kartinkin had taken part in both the poisoning and the robbery.

An old artelshik* was the exception.

The foreman thought the artelshik did not understand, and began to point out to him that everything tended to prove Kartinkin's guilt. The old man insisted he did understand, but still thought it better to have mercy. "We are not saints ourselves," he said, and kept to his opinion.

The answer to the second question, concerning Botchkova, after much dispute, was "Not guilty," there being no clear proofs that she had taken part in the poisoning, a fact her lawyer had brought out strongly. The kindly merchant, anxious to acquit Maslova, insisted that Botchkova was the chief instigator of it all.

* Member of an artel, in which the members share profits and liabilities.

Many of the jury shared this view, but the foreman, wishing to be in strict accord with the law, declared they had no grounds on which to consider her as an accomplice in the poisoning. After much disputing, the foreman's opinion triumphed.

The third question raised a fierce dispute. The foreman maintained that Maslova was guilty, of both the poisoning and the theft. The merchant would not agree. The colonel, the clerk and the old artelshik sided with the merchant. The rest seemed undecided, and the opinion of the foreman began to gain ground, chiefly because all the jurymen were getting tired, and preferred to take up the view that would bring them sooner to a decision and thus liberate them.

From all that had passed, and from Nekhludoff's former knowledge of Maslova, he was certain she was innocent of both the theft and the poisoning, and felt sure that all the others would come to the same conclusion. But he soon saw that the merchant's awkward defense of the girl, based on the unconcealed impression she had made upon him, and for that very reason the foreman's insistence on her guilt, and especially everybody's weariness, were tending to her condemnation. He longed to state his objections, yet he dared not lest the story of Maslova and himself should be discovered. He felt, however, that he could not allow things to go on without stating his objection, and, blushing and growing pale in turn, was about to speak, when Peter Gerasimovitch, irritated by the authoritative manner of the foreman, began to raise his objections, and said the very things Nekhludoff was about to say.

"Allow me one moment," Gerasimovitch broke in. "You seem to think that her having the key proves she is guilty of the theft, but what could be easier than for the servants to open the portmanteau with a false key after she was gone?"

"Of course, of course," said the merchant.

"She could not have taken the money, because in her position she would hardly have known what to do with it."

"That's just what I say," remarked the merchant.

"But it is very likely that her coming put the idea into the servants' heads, and

they grasped the opportunity and shoved all the blame onto her."

Peter Gerasimovitch spoke so irritably that the foreman became irritated too, and went on obstinately arguing Maslova's guilt. Gerasimovitch's words had most weight, however, and the majority were brought to his way of thinking, and decided that Maslova was not guilty of stealing the money, and that the ring was given to her.

When the question of her complicity in the poisoning was raised, her zealous defender, the merchant, declared she must be acquitted, because she could have no reason for the poisoning. The foreman made the point that it was impossible to acquit her, because she herself had pleaded guilty to having given the powder.

"Yes, but she thought it was opium," the merchant answered.

"Opium can kill just as well," said the colonel, who was fond of wandering from the subject. He began telling how his brother-in-law's wife would have died of an overdose of opium if there had not been a doctor near at hand to save her. The colonel told his story so impressively, with such self-possession and dignity, that no one had the courage to interrupt him.

The clerk, emboldened by the consideration accorded the colonel, decided to break in with a story of his own: "There are some who get so used to it that they can take forty drops. I have a relative——" but the colonel would not brook an interruption, and casting a withering glance at the clerk went on to relate further what effects the opium had on his brother-in-law's wife.

"Why, do you know it is getting on toward five o'clock?" exclaimed one of the jury.

"Well, gentlemen, what are we to say, then?" inquired the foreman. "Shall we say she is guilty, but without intent to rob, and without stealing any property? Will that do?"

Peter Gerasimovitch, pleased with his victory, assented.

"But she must be recommended to mercy," said the merchant.

All agreed but the old artelshik, who insisted that they should say "Not guilty."

"It comes to the same thing," explained

the foreman: "without the intent to rob, and without stealing any property—therefore 'not guilty,' that's clear."

"All right; that'll do. And we recommend her to mercy," said the merchant, gaily. They were all so tired, so confused by the discussion, that no one thought of saying that in giving the powder she had had no intent of taking life. Nekhludoff was excited and did not notice the grave omission. Botchkova was declared guilty on the fourth question. The answers were written down in the form agreed upon and taken into court.

Rabelais says that a lawyer who was trying a case quoted all sorts of laws, read twenty pages of juridical, senseless Latin, and then proposed to the judges to throw dice. If the numbers came odd, the defendant was to be decided right; if they came even, the plaintiff was to win.

It was much the same in this case. The most important point was entirely overlooked, because the President, who summed up at such length, omitted to say what he always said on such occasions, that the answer might be "Yes, guilty, but without the intent of taking life"—because the colonel had related the story of his brother-in-law's wife with such a wealth of detail—because Nekhludoff was too excited to notice that the proviso, "without intent to take life," had been omitted, thinking that the words, "without intent," were equivalent to acquittal—and, chiefly, because all were tired, and wished to get out of the jury-room as soon as possible.

The jurymen rang the bell. The gendarme, who had stood outside the door, put his sword back into the scabbard, and stepped aside. The judges took their seats, and the jury filed in.

The foreman solemnly carried the paper to the President, who looked at it and, spreading out his hands in surprise, turned to consult his companions. He was astonished that the jury, having put in a proviso, "without intent to rob," did not put in a second proviso, "without intent to take life." From the decision of the jury it followed that Maslova had not stolen or robbed, but had poisoned a man without any apparent reason.

"Just see what an absurd decision they have come to," he whispered to the mem-

ber on his left. "This means penal servitude in Siberia, and she is innocent."

"Surely you do not mean to say she is innocent?" the serious member protested.

"Yes, she is positively innocent. I think this is a case for putting Article 817 into practice." (Article 817 states that if the court considers the decision of the jury unjust, it may set it aside.)

"What do you think?" said the President, turning to the other member. The kindly member did not answer at once. "I, too, think it should be done," he finally said.

"And you?" asked the President, turning to the serious member.

"On no account," he answered firmly.

"As it is, the papers accuse juries of acquitting too many prisoners. What will they say if the courts do it? I shall not agree to that on any account."

The President looked at his watch. He handed the questions back to the foreman. All stood up. The foreman, shifting his weight from one foot to the other, coughed, and read the questions and answers. Everybody—court, secretary, lawyers, and even the public prosecutor—expressed surprise. The prisoners sat impassive, evidently not understanding the meaning of the answers. After the listeners were again seated, the President asked the prosecutor what penalties would be imposed.

The prosecutor, glad of his unexpected success in getting Maslova convicted, and putting the credit entirely down to his eloquence, rose and said:

"With Simeon Kartinkin I should deal according to Statute 1,452 and page 93. Euphemia Botchkova, according to Statute —, et cetera. Katerina Maslova, according to Statute —, et cetera. All three punishments were the heaviest that could be inflicted.

"The court will adjourn to consider the sentence," announced the President.

"D'you know, sirs, we have made a shameful hash of it?" said Peter Gerasimovitch, turning to Nekhludoff. "Why, we've sent her to Siberia."

"What are you saying?" asked Nekhludoff, in great excitement. This time he did not notice the teacher's familiarity.

"Why, we did not put in our answer, 'guilty, but without intent to kill.' The

secretary just told me she will probably get fifteen years' penal servitude."

"Well, but it was so decided," said the foreman.

Peter Gerasimovitch began to dispute this, saying that since she did not take the money, it followed naturally that she could not have had any intention of committing murder.

"But I read the answer before going out," the foreman defended himself, "and nobody objected."

"I never imagined this," Nekhludoff exclaimed. "We must set this right."

Gerasimovitch shook his head. "It is too late now," he said.

Nekhludoff looked at Maslova. She was smiling. Another feeling stirred Nekhludoff's soul. He had expected her acquittal, and, thinking she would remain in the town, was uncertain how to act toward her. But Siberia and penal servitude would cut off every possibility of their meeting again. The wounded bird would stop struggling in the game-bag, and no longer remind him of its existence.

XV.

Peter Gerasimovitch's assumption was correct. The President came into the court-room with a paper and read as follows: "April 28th, 188—, by His Imperial Majesty's ukase No. —. The Criminal Court, on the strength of the decision of the jury, in accordance with page 3 of the 771st Statute, page 3 of the 776th and 777th Statutes, decrees that the peasant Simeon Kartinkin, thirty-three years of age, and the *mezchanka* Katerina Maslova, twenty-seven, are to be deprived of all property rights and sent to penal servitude in Siberia. Kartinkin for eight, Maslova for four years, under conditions stated in Statute 25 of the Code; the *mezchanka* Botchkova, forty-three years old, is to be deprived of all special personal and acquired rights and to be imprisoned for three years under the conditions stated in Statute 48 of the Code; the costs of the case to be borne equally by the prisoners, and in case of their being without sufficient property the costs to be transferred to the treasury. Articles of material evidence, including the ring, to be sold, and the vials destroyed." These sentences were imposed.

Kartinkin stood holding his arms close to his sides and moving his lips. Botchkova seemed perfectly calm. Maslova, when she heard the sentence, blushed scarlet. "I'm not guilty, not guilty!" she suddenly cried, her words sounding shrilly through the room. "It is a sin! I am not guilty! I never wished, I never thought! I am telling the truth!" She sank upon the bench, bursting into tears, and sobbed aloud. When Kartinkin and Botchkova went out, she did not move, and a gendarme had to touch the sleeve of her cloak.

"No, it is impossible to leave it as it is," said Nekhludoff to himself, utterly forgetting his former evil thoughts. He did not know why he wished to look at Maslova once more, but hurried out into the corridor. A number of people crowded about the door. The lawyers and jury were going out, pleased to have finished the business. Nekhludoff was obliged to wait a moment. When he got into the corridor, Maslova was already far away. He hurried after her, regardless of the attention he was attracting, caught up to her, passed on and stood still. She had stopped crying, and was sobbing and wiping her tear-stained face with the end of the kerchief on her head. She passed without noticing him. Nekhludoff hurried after the President, whom he found in the lobby, putting on his light gray overcoat. Just as he took his silver-mounted walking-stick from an attendant, the Prince came up.

"Sir, may I have a few words with you?" asked Nekhludoff. "I am one of the jury."

"Oh, certainly, Prince Nekhludoff; I shall be delighted. I think we have met before," the President replied, pressing Nekhludoff's hand, and recalling with pleasure that evening when he had first met Nekhludoff and when he had danced so gaily, better than all the young ones.

"What can I do for you?"

"There is a mistake in the answer concerning Maslova. She is not guilty of poisoning, and yet she is condemned to penal servitude," began Nekhludoff, with a preoccupied and gloomy air.

"The court passed sentence in accordance with the answers you yourselves had given," said the President, moving toward

the front door, "though they did not seem to be quite right," and he remembered that he had been going to explain to the jury that a verdict of "Guilty" meant guilty of intentional murder unless the words, "without intent to kill," were added, but in his hurry to get the business over had omitted to do so.

"Yes; but could not the mistake be rectified?"

"A cause for appeal can always be found. You will have to get legal advice," said the President, putting on his hat a little to one side, as he kept on his way to the door.

"But this is terrible."

"Well, I'll explain the exact situation," said the President, evidently wishing to be as polite and pleasant to Nekhludoff as he could. Then, having arranged his whiskers over his coat collar, he put his hand lightly under Nekhludoff's elbow and still directing his steps toward the front door said, "You are going, too?"

"Yes," said Nekhludoff, quickly getting his coat and following him.

They went out into the bright sunlight, and had to raise their voices because of the rattling wheels on the pavement.

"The situation is a curious one. You see," continued the President, "there were two ways of dealing with Maslova's case: either practically an acquittal, with imprisonment for a short time perhaps, taking her preliminary confinement into consideration, or else, Siberia; there is nothing between. Had you but added the words, 'without intent to kill,' she would have been acquitted."

"Ah, that should have been done!" cried Nekhludoff.

"That's the whole of the matter," said the President, with a smile, looking at his watch. It lacked only three-quarters of an hour to the time appointed by the Swiss girl. "Now if you want to take this matter up, you'll have to find a cause for an appeal. That can easily be done." Then he summoned a trap, and as he slipped into it, bowed and smiled pleasantly and said: "Good-afternoon. If I can be of any use, my address is Dvornikov House, on the Dvorianskaya. It is easy to remember."

Nekhludoff's conversation with the

President, and the fresh air, had quieted him a little. He realized that his unusual emotion was due to the strange experiences of the day. He had decided it was absolutely necessary to take steps at once to help Maslova. "Yes, at once," he thought, "it will be best to find out where Fanazin or Mikishin lives." They were two well-known lawyers whom Nekhludoff called to mind. He returned into the court, and in the first corridor met Fanazin himself.

Fanazin knew Nekhludoff by sight and name, and said he would be very glad to be of service to him.

Nekhludoff stated his case then and there. "I was on the jury to-day and we condemned a woman to Siberia—an innocent woman: this bothers me very much." To his own surprise, he blushed and became confused.

Fanazin glanced at him rapidly and curiously.

"Well?" was all he said.

"We condemned the woman and I should like to appeal to a higher court."

"To the Senate, you mean," said Fanazin, correcting him.

"Yes, and I want you to take the case." Nekhludoff wanted to get the most difficult part over, and went on, "I shall take the costs upon myself, whatever they may be."

"Oh, we can settle all that," said the lawyer, condescendingly smiling at Nekhludoff's inexperience. "I shall look the case over to-morrow or the day after—no, better on Thursday. If you will come to me at six o'clock, I shall give you an answer."

This talk, and the fact that he had taken measures for Maslova's defense, quieted Nekhludoff still further. He went out into the street. As he strolled along, he remembered the Korchagins' dinner, and looked at his watch. It was not yet too late to get there in time. He heard the ringing of a passing tram, ran to catch it, and ten minutes later was at the Korchagins'.

XVI.

"Please to walk in, your Excellency," said the friendly, fat doorkeeper of the Korchagins' big house, as he opened the

oaken door. "You are expected. They are at dinner."

"Are there any strangers?" asked Nekhludoff.

"Mr. Kiolosoff and Michael Sergeivitch only."

Nekhludoff went up the stairs and passed through the familiar ball-room into the dining-room. The whole Korchagin family, except the bedridden mother, Sophia Vasilievna, were sitting round the table.

At the head was old Korchagin; on his left, the doctor; on his right, a visitor, Ivan Ivanovitch Kiolosoff, a former *maréchal de noblesse*, now bank director, Korchagin's friend and a liberal. Next on the left, Miss Rayner, the governess of Missy's little sister, and then the four-year-old child herself. Opposite them, Missy's brother, Petia, the only son of the Korchagins, a public-school boy of the sixth class. It was because of his examination that the Korchagins were still in town. Next to him sat a university student who was tutoring him, and Michael Sergeivitch Telegin, generally called Mishka, Missy's cousin; opposite him, Katerina Alexevna, a maiden lady, and at the foot of the table sat Missy herself, with an empty place by her side.

"Ah! that's all right! Sit down! We are still at the fish," welcomed old Korchagin, lifting his bloodshot eyes to Nekhludoff.

Though Nekhludoff knew Korchagin very well, and had often seen him at dinner, to-day this red face, with the sensual lips, the fat neck above the napkin stuck into the waistcoat, and the whole overfed military figure, struck him very disagreeably. He went round, shaking hands with one and all except Korchagin. The ladies rose when he approached. He excused himself for being late, and was about to sit down, but old Korchagin insisted he should whet his appetite from the small dishes of lobster, caviare, cheese and salt herring which stood on a side-table.

"Well! Have you succeeded in undermining the basis of society?" asked Kiolosoff, ironically quoting an expression used by a retrograde newspaper, which had been attacking trial by jury. "Acquitted the culprits and condemned the innocent? Have you?"

At the risk of seeming rude, Nekhludoff left Kiolosoff's question unanswered, and sitting down to his steaming soup, began eating.

"Do let him eat," said Missy, with a smile. The pronoun "him" she used as a reminder of her intimacy with Nekhludoff. Kiolosoff went on in a loud voice and lively manner, giving the contents of the article against trial by jury which had aroused his indignation. Missy's cousin, Michael Sergeivitch, indorsed all his statements, and related the contents of another article in the same paper. Missy was, as usual, very distinguished, and well, unobtrusively well, dressed.

"You must be terribly tired," she said to Nekhludoff.

"Not particularly. And you? Have you been to look at the pictures?" he asked.

"No. We have put that off. We have been playing tennis at the Sanemotovs. It is quite true, Mr. Horseks plays remarkably well."

Nekhludoff had come here in order to distract his thoughts, for he used to like being in this house. Strange to say, to-day everything in the place was repulsive to him, even Missy herself, who seemed unattractive and affected. Most unpleasant of all was the pronoun "him" that Missy had used. Nekhludoff had long been wavering between two ways of regarding Missy. Sometimes he looked at her as if by moonlight, seeing nothing but the beautiful face. She seemed fresh, pretty, clever and natural. Then again, as if the bright sun shone on her, he could not help seeing her defects. This was such a day for him. He saw all the wrinkles of her face, knew which of her teeth were artificial, saw the way her hair was crimped, the sharpness of her elbows, and, above all, how large her thumb-nail was and how like her father's.

"A dull game tennis is," said Kiolosoff. "We used to play *lapta*, when we were children; that was much more amusing."

"Oh, no; you never tried it; it is awfully interesting," said Missy, laying, as it seemed to Nekhludoff, a very affected stress on the word "awfully." Then a dispute arose in which Michael Sergeivitch, Katerina Alexevna, and all but the governess, the student and the children, took part. They sat silent and wearied

"Oh, these everlasting disputés!" exclaimed old Korchagin, laughing. He noisily pushed back his chair and left the table.

Everybody rose after him, and all went up to another table where stood glasses full of scented water, from which they rinsed their mouths.

"Will you come to mama?" asked Missy of Nekhludoff, after a few moments.

"Yes, yes," he said, in a tone which plainly proved he did not want to go.

"Mama will be pleased. You may smoke there; and Ivan Ivanovitch is also with her," Missy continued.

The mistress of the house, Princess Sophia Vasilievna, was an invalid. For eight years, in the presence of visitors she had reclined in lace and ribbons, surrounded with velvet, gilding, ivory, bronze, lacquer and flowers. She never went out, and received only, as she said, intimate friends, or those who, according to her idea, were not of the common herd.

Nekhludoff was one of these friends, because he was considered clever, because his mother had been an intimate friend of the family, and because it would be desirable for Missy to marry him.

Sophia Vasilievna's room lay beyond the large and the small drawing-rooms. In the large drawing-room, Missy, who was walking in front of Nekhludoff, stopped resolutely, and taking hold of the back of a small green chair, looked at him.

Missy was very anxious to be married. He was a suitable match. Besides, she liked him, and had accustomed herself to the thought that he would be hers. She had confessed to herself that to lose him would be very mortifying. "I see something has happened," she said. "Tell me, what is the matter with you?"

Nekhludoff remembered the meeting in the law-court, and frowned and blushed.

"Yes, something has happened," he said, wishing to be truthful. "Something very unusual and distressing."

"What is it? Tell me what it is."

"Not now. Please do not ask me to tell you. I have not yet had time fully to consider it," and he blushed again.

"And so you will not tell me?" She pushed back the chair she was holding.

"Well, then, come!" she said, shaking her head ill-naturedly.

He thought her lips were unnaturally compressed in order to keep down tears. He was ashamed of having hurt her, and yet he knew that the least weakness on his part would leave an opening for her and, perhaps, lead to his engagement to her. To-day he feared this more than any other contingency, and silently followed her to the Princess's cabinet.

XVII.

Princess Sophia Vasilievna, Missy's mother, had finished her very elaborate and nourishing dinner. She always ate alone, so that no one could see her at this unpoetical function. A small table stood by her couch with her coffee. She was smoking a pachitas. She was a tall, thin woman, who had dark hair, large black eyes and long teeth, and still pretended to be young.

The doctor's devotion to her was being talked about. Nekhludoff had known that some time. When he saw the doctor, with his oily, glistening beard, parted in the middle, sitting by her couch, he not only remembered these rumors, but felt a repugnance come over him. By the table at the Princess's side sat Kiolosoff, on a low, soft easy-chair, stirring his coffee. A glass of liqueur stood on the table. Missy came in with Nekhludoff, but did not remain in the room.

"When mama gets tired of you and drives you away, then come to me," she said, merrily, turning to Kiolosoff and Nekhludoff.

The Princess smiled at Nekhludoff and said: "I hear you have come from the law-courts very much depressed. I think it must be very trying to a person with a heart," she added in French.

"Oh, yes, indeed," Nekhludoff replied. "One often feels his de—one feels he has no right to judge."

"Comme c'est vrai," the Princess cried, as if struck by the truth of this remark. She was in the habit of artfully flattering all those with whom she conversed. She continued the conversation and endeavored to draw Nekhludoff out on various topics. He replied in monosyllables, as if disgusted with her flattery, and she soon turned to Kiolosoff, asking his opinion of a new play. She spoke as if Kiolosoff's

opinion would decide all doubts. Kiolosoff found fault with the drama and its author, and was led to express his views on art. Princess Sophia Vasilievna seemed impressed by the truth of his arguments, trying at the same time to defend the drama but making it evident that what he said modified her opinion. Nekhludoff looked and listened, but saw and heard little.

Listening now to Sophia Vasilievna, now to Kiolosoff, Nekhludoff noticed that neither he nor she cared anything about the drama or each other, and that Kiolosoff, having drunk vodka, wine and liqueurs, was a little tipsy—not tipsy like the peasants who drink seldom, but like people to whom drinking wine has become a habit. He did not reel about or talk nonsense, but was in a state that was not normal. He was excited and self-satisfied. Nekhludoff also noticed that the Princess during the conversation kept looking uneasily at the window, through which a slanting ray of sunshine was creeping up to her, which might too vividly light up her aged face.

A footman was called, who carefully drew the curtain so that not a single ray could fall upon his mistress. She was impatient and hasty with the man, and the curtain had to be arranged twice before she was satisfied. After this she seemed to be wearied of Nekhludoff's presence, and said to him: "Well, you know Missy is waiting for you—go and find her. She wishes to play a new piece by Grieg to you. It is most interesting."

"Missy doesn't want to play anything; the woman is simply lying," thought Nekhludoff, rising and pressing her hand.

Katerina Alexevna met him in the large drawing-room, and greeted him in French: "I see the duties of a juryman act depressingly upon you."

"Yes; pardon me. I am in low spirits to-day, and have no right to weary others by my presence."

"Why are you in low spirits?"

"Pardon me if I do not speak on that subject."

"Don't you remember how you used to say that we must always tell the truth? And what cruel truths you used to tell us all! Why do you not wish to speak out

now? Don't you remember, Missy?" she said, turning to Missy, who had just come in.

"Because we were playing a game then," Nekhludoff replied, seriously. "One may tell the truth in a game, but in reality we are so bad—I mean that I am so bad, that I, at least, cannot tell the truth."

"Oh, do not correct yourself, but rather tell us why *we* are so bad," said Katerina Alexevna, playing with her words and pretending not to notice how serious Nekhludoff was.

"There is nothing worse than to confess to being in low spirits," remarked Missy. "I never do, and am, therefore, always in good spirits. Are you coming into my room?" she continued. "We shall try to cheer you up." He excused himself, saying he had to be at home, and began taking leave. Missy kept his hand longer than usual.

"Remember that what is important to you is important to your friends," she said. "Are you coming to-morrow?"

"I am afraid not," Nekhludoff replied. He felt ashamed, without knowing whether for her or for himself, and blushed as he turned away.

"What is it?" asked Katerina Alexevna. "I must find out."

Missy was going to reply, but stopped and looked down. All the light had gone out from her face. She considered Nekhludoff as her own and to lose him would be very hard.

XVIII.

"Oh, the horror and shame of it all!" Nekhludoff kept saying to himself, as he walked home along the familiar streets. The depression he had felt while speaking to Missy would not leave him. He was sure he was right, for he had never said anything to her that might be considered binding. He had never made her an offer, but he knew that in reality he had bound himself to her, that he had promised to be hers. As he walked along, he felt in his whole being that he could not marry her.

"Everything is stupid and shameful," he said, as he stepped into the porch of his house. "I am not going to have any supper," he said to his man-servant, Corney. He wished to be left alone. It

seemed to him that everybody was bothering him as if to spite him. When Corney went away with the supper things, Nekhludoff came up to the tea-urn and was going to make himself some tea, but hearing Agraphina Petrovna's footsteps, went hurriedly into the drawing-room, so as not to be seen by her, and shut the door after him. This drawing-room was the room in which, three months before, his mother had died. Two lamps, with reflectors, were burning, one lighting up his father's, the other his mother's portrait. As he entered, he remembered what his last hours with his mother had been. They also seemed shameful and horrid. He remembered how during the latter period of her illness he had simply wished for her death. He had said to himself that he wished it for her sake, that she might be released from her suffering, but in reality he wished for his own sake to be released from the sight of pain.

Trying to recall a pleasant memory of her, he went up to look at her portrait, painted by a celebrated artist. She was depicted in a low-necked black-velvet dress. The artist had evidently painted the dazzlingly beautiful shoulders and neck with particular care. There was now something very revolting and blasphemous to him in this representation of his mother as a half-denuded beauty. It was all the more disgusting because three months ago in this very room lay this same woman afflicted with a terrible disease. He remembered how, a few days before her death, she clasped his hand with her bony, discolored fingers, looked into his eyes, and said, "Do not judge me, Mitia, if I have not done what I should," and how the tears came into her eyes, grown pale with suffering.

He looked up again at the woman with the splendid marble shoulders and arms, and triumphant smile on her lips. The half-bared bosom of the portrait reminded him of another young woman whom he had seen dressed in the same way a few days before. It was Missy, who had devised an excuse for calling him into her room just as she was ready to go to a ball, so that he should see her in her ball-dress. It was with disgust that he remembered her fine shoulders and arms. "And that

father of hers, with his dark past, and his cruelties, and her mother with her doubtful reputation!" All this disgusted him and also made him feel ashamed.

"No, no," he thought; "I must free myself from all these false relations with the Korchagins, and the inheritance, and all the rest. O to breathe freely! To go abroad—to Rome, and work at my picture." He remembered the doubts he had about his talent for art. "Well, never mind, only just to breathe freely; first Constantinople, then Rome. But I must get through this jury business and arrange with the lawyer first."

Suddenly there arose in his mind an extremely vivid picture of a prisoner with black, slightly squinting eyes. How she began to cry when the last words of the prisoners had been heard! He began pacing up and down the room. One after another the scenes that he had lived through with her rose up in his mind.

"Why, I loved her, really loved her with a good, pure love, that night; I loved her even before." He remembered himself as he had then been. A breath of that freshness, youth, and fulness of life seemed to touch him, and he grew sad. The difference between what he had then been and what he now was, was enormous. Then he was free and fearless, and innumerable possibilities lay open before him. Now he felt himself caught in the meshes of a stupid, empty, valueless, insignificant life, out of which he saw no means of extricating himself even if he wished to, which he hardly did. He remembered how proud he used to be of his straightforwardness; how he had made a rule of always speaking the truth, and really had been truthful, and how he was now sunk deep in lies—in the most dreadful of lies, lies considered by all who surrounded him as the truth. So far as he could see, there was no way out of these lies. He had sunk in the mire, was used to it, and indulged himself in it.

How was he to disentangle himself from Missy? How choose between the two opposites—the recognition that holding land was unjust, and the heritage from his mother? How atone for his sin against Katusha? This, he argued, could not be left as it was. He could not abandon a woman he had loved and satisfy himself

with paying money to a lawyer to save her from hard labor in Siberia, for she had not deserved even hard labor. Was it possible to atone for a fault by paying money? He thought he was atoning for his wrong when he gave her gold. Only a scoundrel, a knave, could do such a thing. "And I—I am that knave, that scoundrel!" He went on aloud: "But is it possible"—he stopped—"is it possible that I am really a scoundrel? Well, who but I?" he answered himself. "And then is this the only thing?" he went on, convicting himself. "Is not my position with regard to money base and disgusting? To use riches I consider unlawful, on the plea that they are inherited from my mother? And the whole of my idle, detestable life? And my conduct toward Katusha to crown all? Knave and scoundrel! Let men judge me as they like, I can deceive them, but myself I cannot deceive." Suddenly he understood that the aversion he had lately felt toward everybody was an aversion toward himself. In this acknowledgment of his baseness, there was something painful and yet joyous and calming. More than once in Nekhludoff's life there had been what he called a "cleansing of the soul." By "cleansing of the soul" he meant a state of mind in which after a long period of sluggish inner life or mind—a total cessation of the inner life—he began to clear out all the rubbish that had accumulated in his soul, and was the cause of the cessation of the true life. His soul needed cleaning as a watch does.

Thus he had several times in his life raised and cleansed himself. A long period had now elapsed since the last cleansing, and the discord between the demands of his conscience and the life he was leading was greater than it had ever been before. He was horror-struck when he saw how great the divergence was. It was so great, and the defilement so complete, that he despaired of ever purifying his soul. "Have you not tried before to become better without avail?" whispered the voice of the tempter within. "What is the use of trying again? You are not alone—all are alike. Such is life." But the free spiritual being, which alone is true, alone powerful, alone eternal, was already awake

in Nekhludoff, and he could but believe it. Enormous as the distance was between what Nekhludoff wished to be and what he was, nothing appeared insurmountable to the newly awakened spiritual being.

"I shall break this lie that binds me, at any cost, and will confess everything, tell everybody the truth, and will act the truth," he said aloud, resolutely. "I shall tell Missy the truth—shall tell her I am a profligate and cannot marry her, and have only trifled with her. I shall dispose of my inheritance in such a way as to acknowledge the truth. I shall tell Katusha that I am a scoundrel, and have sinned toward her, and will do all I can to ease her lot. Yes, I will see her and will ask her to forgive me.

"Yes, I will beg her pardon, as children do"—he stopped—"will marry her if it is necessary." He stopped again, clasped his hands in front of his breast, lifted his eyes, and said, in a voice full of fervor, "Lord, help me, teach me; come and enter within me and purify me of all this abomination."

He prayed and asked God to help him, to enter within him and purify him. What he was praying for had already happened. The God within him had awakened in his consciousness. He felt himself one with Him. He felt not only the freedom, fulness and joy of life, but all the power of righteousness. He felt capable of doing the best that man could do.

He went to the window and opened it. It looked into a garden. It was a moonlit, quiet, fresh night. A vehicle rattled past and then all was still. The shadow of a tall poplar fell on the ground just opposite the window. The intricate pattern of its bare branches was clearly defined on the clean-swept gravel; to the left the roof of a coach-house shone white in the moonlight; in front the black shadow of the garden wall was visible through the tangled branches of the trees.

Nekhludoff looked at the roof, the moonlit garden, the shadows of the poplar, and drank in the fresh, invigorating air.

"How delightful; how delightful! Oh, God, how delightful!" he said. He meant that which was going on in his soul.

(To be continued.)

THE IDEAL AND PRACTICAL ORGANIZATION OF A HOME.

BY VAN BUREN DENSLOW, LL.D.

ECONOMY includes two aims, viz., whatever increases income and whatever diminishes expenditure. These two aims are open to the further definition that nothing must be set down as a true increase of income which is obtained at the sacrifice of the means of obtaining in future an equal income by equal effort; such would be loss of health, of character, of capital, of true friends, of needed affections, of virtue, of courage or of self-respect. Diminution in expenditure likewise is not to be set down as truly economic when it takes a form which tends to lose more than what is saved is worth. This is commonly styled "penny-wise and pound-foolish," "saving at the spigot and losing at the bung," and the like. Every country has had a satirist under every bush for the economy that wastes more than it saves. Solomon says, "There is that scattereth and yet increaseth, and there be that withholdeth more than is meet and yet it tendeth to poverty." Jesus reduces the whole conflict between the lower and the higher nature to a struggle between two standards of economy, in saying, "For whosoever will save his life shall lose it; and whosoever will lose his life for my sake shall find it."

To organize a family, an army, a state, a church, an institution, means to persuade and drill its members into such a unity and power of action as will bring to each and all of them the largest power, the highest success, the deepest enjoyment of the tie that makes them one in feeling and action, and the greatest profit of all sorts from being the members of a common entity. Organization is made up of courage and tenderness in the parent, responded to

by trust and obedience in the offspring; of experience acting as guide to simplicity; of instruction begetting reflection; of authority commanding respect.

It may be set down as axiomatic, therefore, that a family, an army, a state, a church or a business corporation which has no head, can have no organization. It may be a herd, a mob or a drove, in point of numbers, but it will fail in all the great issues of life.

In the Roman family, the authority of the parent was absolute until he died. Hence the great families of Rome took the place in wealth-production of our modern corporations, and a state was founded which led the world's civic civilization for sixteen centuries, and then dominated its chief religion for sixteen more centuries.

Adoption into these great families was sought by the less favored. Even purchase by them was a favor. The pater familias became the chief of an active clan, and the lord of many square miles of mines, lands and forests. Out of the adhesions and continuity of the great families grew the permanency and power of the Roman state and the vigor of the Roman civilization. The gens was the group of all related families in whose veins flowed the common ennobling blood. So deep an impress did it make on the world that to this day nearly everything noble in character must be expressed through some word derived from gens, such as gentle, gentleman, genius, ingenious, ingenuity, gentile, and the like.

The best two housekeepers of this century have been Napoleon and Victoria, and both are of Roman blood. Victoria's family as

EDITORIAL NOTE.—It was intended to follow the prize article by Mrs. Albert Norton Wood on "The Ideal and Practical Organization of a Home" arranged for incomes between \$1,600 and \$2,500 a year, by the publication of the prize article in the class of incomes of \$250 a day; but several of the papers submitted in this same competition were of so instructive a character, and regarded the matter from such different points of view, that in effect they might almost be called complements of Mrs. Wood's article; and it has been deemed best to print two before proceeding with the other articles of the series. The first of these two is that here given. The one which will follow has a rather curious history. It was signed "L. D. B." Upon the editor's addressing the writer and offering an honorarium for the article, the following reply was received: "Dayton, Ohio, March 25th, 1899. Dear Sir: It may be of interest to you to know that this article was a composite article, prepared by forty or fifty young women of the Indicator Department of the National Cash Register Company, and put into form by a member of the committee appointed to examine the submitted suggestions."

a Guelph originated in the fourteenth century in the Counts d'Este of Italy, and Napoleon's Corsican ancestry was exclusively Roman. Both organize perfectly, securing by tact, firmness and fidelity the implicit obedience of every friend and helper.

To be educated in the prompt recognition of authority is the basis of good manners and good morals. Every person of good intellectual power shows it primarily by the combination of intelligence, courtesy and gentleness, backed by firmness, which insists that the sovereignty shall be in a special instance where the average experience of mankind has determined that it should be in general. This is the one distinction between the well-bred and the ill-bred, which is apparent in every person we meet the instant he ventures the slightest remark. A woman cannot speak to her child without giving to every listener her status in society and the measure of her income. The great economy arising through headship consists in cutting off debate, and proceeding to that action for which all organizations, including the family, are formed. Even the British Parliament, framed expressly for debate, had to adopt a *clôture*. Obedience is the *clôture* which unites a family, an army, a church, a state or an institution for action.

Yet the authority must coexist with that sweetness which is of the essence of home. Those who would organize a home with sweetness must study well the homes from which they select their partners. Most homes are sweet occasionally, but if it be a sweetness that results from simper, from catlike concealment of an adverse will, from the hypocritical suppression of an opposing judgment, or from the cold calculation that although you are dreaming it is not worth while to tell you so until you are enmeshed and caught, all these interested imitations of sweetness are something you will learn to detect as counterfeit; they are miserably fatal to all true candor, sincerity and politeness. The highest test of sweetness is the capacity to clothe the clear and frank expression of an adverse opinion, or even of an undesired choice, in words of real personal kindness and sincere regard.

Sweetness can be unaffected and long-

continued only when it is the product of genuine reciprocal admiration. To win it requires merit. It must be deserved or it cannot be rendered. Merit requires, in its turn, talents or parts, good taste, judgment, honesty, assiduity, devotion, method and loyalty. These are the qualities which distinguish the true upper or well-bred classes from the lower or vulgar; the refined from the gross; the creative, inspired and leading from the dull, phlegmatic and "sagging down"; the socially true and trustworthy from the socially false and deceptive.

The highest, because most composite, object of a home is social power for the family. The lowest is the mere physical comfort of its members. No increase of income, or diminution of expenses, is economic which lessens the social power of the family as a whole, provided the means of winning this social power can be presently used without endangering the ability of the family to use them in the future.

The economies of life must always be regarded as means to its supreme object, the pursuit of happiness. Our highest pleasure is association with our fellow-men on the bases of authority and sweetness, and our highest duty is performed when we have brought about, among those we know, the largest activity of association on these same bases of authority and sweetness. The highest dignity, beauty and glory of a home is when society widely seeks it, and enjoys seeking it, because it is there introduced into the near view of an authority that is filled with sweetness, and of a sweetness that is widely authoritative.

Of course, authority implies achievement. Mankind cannot bow down to a man or woman who has done nothing, knows nothing and is nothing. King Lear's daughters could have seen no majesty in him if there had been behind him no kingdom. And, per contra, sweetness is but a tacit gratitude for pleasant gifts. The courtship of lovers illustrates it. No presents, no rapture. While sweetness is essential to authority in a home, and authority is essential to the unity of feeling and action which are essential to social power, this sweetness must, like every other good, be earned, bought and paid

for, as truly as the authority. If the home is marked by erudition, the sweetness cannot be marked by ignorance. It must be the sweetness that springs from omniscience. If the sweetness is pure, the authority must be pure. If the one is brave, the other must be free from fear. If one is free, both must be free.

Economic action in a family takes two forms, viz., uniting the common efforts of all its members to promote the family income; and accepting with intelligent grace the common deprivations necessary to diminish the family waste of capital, health, vigor, time, labor and money.

If one daughter in a family has a voice and talent for singing, which promises by culture to enable her to earn a salary of from \$800 to \$1,200 in a church choir or operatic company, it might be bad economy to insist that her labors in churning or cheese-making should equal those of her sisters, at tasks whose fair value would not exceed \$4 per week. That family is best organized for productive effort in which each one's most promising talent is sedulously stimulated by common praise, and developed by both individual effort and common and reciprocal sacrifice, until it begins to yield profitable returns of affection, pride, fame and fortune. Who shall compute in arithmetic the gain to Pelatiah Webster's family which accrued from sending young Daniel to Dartmouth? It is immeasurable. It lifted an obscure family into the grade of the world's true intellectual nobility. It was a greater advance than to make them barons or earls.

The feeling of family unity and the willingness of any member to make the sacrifices of personal convenience essential to the evolution of another, was in the early days of the Republic very strong. It was specially indicated by the often heroic efforts of very poor families to send at least one son to college.

In diminishing the expenditure necessary to maintain a family, great art and skill are made possible, and even pleasing, by a good deal of industry. Burns refers to the good Scotch housewife who

"Gars auld claes look amaisht as weel's the new."

Suits made for the head of the family,

when well worn were cut down by the eldest daughter and reappeared on the sons, a very great saving when a man's suit was worth a month's wages. If the family were large, \$100 a year might be saved in this way. When the cloth had made the circuit of the household, it still went into patches, pin-cushions and reticules, and finally covered the floor as a rag-carpet.

Economy in clothing changes greatly with the modern diminution in the money prices of clothing from \$60 a suit in 1776 to \$12 a suit in 1899. This gain is intensified by the increase in the rates of wages, which are the money value of time, from between twelve and sixteen cents a day in the earlier period to \$4 a day in the latter. In the former period it would have been economical to pay a higher wage to the carpenter who carefully picked up the nails he dropped than to one who did not. Now, by actual computation, the carpenter's time, at \$4 a day, lost in stooping to pick up a nail, is worth more than the nail, at four cents a pound. Good organization would suggest the placing of such easily performed tasks upon inexperienced and cheaper labor.

Economy in clothing can still be practised in avoiding the fraudulent substitution of cotton for wool in pretended flannels for underwear—a fruitful source of colds, consumption and pneumonia, which lose time or destroy life. Also in protection against rain, mud and slush by the use of cheap rubber wraps and shoes, which afford a water-tight protection, in place of dear woolen wraps and leather shoes, which, though good against cold, afford almost no protection against water; the cost of wetting good leather being immensely greater than the wear and tear of good rubber.

Economy in foods requires foresight, and a place for storing food in considerable quantities, a convenience which nearly all modern flats and small houses lack. Meats which can be bought in the carcass or quarter for four to six cents per pound, bring in the retail cuts twelve to twenty-four cents, and still omit much of the fatty and more nutritious elements essential to a healthy diet, both for the lungs and for warmth and strength. A family of four persons, by buying its meats whole, can re-

duce its monthly meat bills from \$16 to \$8.

In economizing on food bills, it must be borne in mind that the quality and diversity of the food is the source of the working- and brain-power of the family. A high order of brain- and nerve-power cannot come from a cheap, or limited, or vegetarian diet. Vegetables are cheap but in-nutritious. Bread in London is largely made of potatoes and beans as a substitute for wheat, as is indicated by the fall there of the price of bread per pound below that of flour per pound, but the nutritive power declines five-sixths to effect a money saving of a third. The vegetarian nations—India and China—invent nothing and lack thought and will-power. If a family is weak-lunged, its members need fats, cream, butter and steaks. If diabetic, they must avoid sugar and roots and starch. In proportion as the occupation wears out nerve-power, the diet must be concentrated, diversified and rich.

In fuel, the poor pay almost exactly twice the rates paid by the rich for a given quantity. Coal bought by the ton at \$5 per ton, retails by the bushel at twenty-five cents per bushel; a ton of thirty-six bushels thus costing \$9. If persons of incomes below \$3,000 a year run monthly accounts at stores and butcher-shops and have groceries, meats and fuel delivered at their dwellings for use, their cost of living is enhanced from a fifth to a fourth by grocers' and messengers' wages.

The expenditure upon walls, floors and furniture is an important element of household economy. It requires no technical training to apply varnish and paints to the renewal of house interiors. All wood surfaces, especially of chairs, doors, bases, tables, balusters and pictures, should be washed with ammonia, nearly or quite pure, at least once a year, for the simple purpose of cleanliness. This, if well done, will bring them out new. The feather dusters of the servants should be abolished, except as to cloth surfaces and upholstering. They merely stir up dirt in one place to let it settle in another. They cannot remove it. To be removed, it must go out in the slop-pail. Good carpets of Wilton, Axminster, Moquette or Brussels, when soiled, should be scrubbed with soap and water like a bare floor. It will restore their

color better than beating. Being of wool, which in its mode of growth and nutrition is a vegetable, like human hair or grass, they need moisture to preserve their fiber. Soap-suds gives them longer wear.

The function of a servant or servants, in a family of four persons, should be that of relieving the mistress of the household labor to enable her to do more profitable or higher social work. If she is in poor health, or has higher or more profitable work to do, the employment of servants becomes economic, otherwise it is a waste. Considered as a waste, when it is such, the average cost of one servant certainly equals that of two members of the family, owing to the inferior economy of those who work for others compared with that of those who work for themselves, and to the disrespect for actual economy to which the servant class instinctively adhere.

In estimating the purchasing power of an income of from \$1,600 to \$2,500, much depends on the part of the country in which the family must live to carry on its occupation. Such a family can live as well for \$2,500 in parts of Maine, New Hampshire or New Jersey, as for \$7,000 in New York city. And in Georgia or east Tennessee it can live as well for \$600 as in Maine for \$1,200. The meat bill of six persons in New York city will adhere closely to \$1 each per week, or say \$300 per year. Groceries, \$2.50 each adult per week and \$1.50 each child, \$11 in all, being \$44 per month or \$528 per year. The wage-working and salaried classes average a fourth or fifth of their gross incomes for rent, it being on a \$1,600 income \$400, and on one of \$2,500 about \$600. Fourteen hundred dollars are thus devoted merely to keeping the human mechanism running—cost of food and shelter. Such a family can clothe itself fairly well for \$500, leaving \$600 for savings or investments, luxuries, social expenses, books, travel, and increased supply of house-furnishings and clothing. It is on this \$600 that the "drink bill" in its moderate stages encroaches. Its best antidote is a lively, rollicking, music-filled, sociable, much-visited, well-planned home, full of games and study.

An income in excess of \$4,000 would

involve no larger grocery or meat bills than one as low even as \$1,600, except in so far as they would be increased by servants. The actual cost of the food of a working family does not vary much as between the rich and the poor. A poor man's meat and groceries cost about the same as a rich man's. In most parts of the country a family may keep one or two horses and several house-servants or a gardener or florist within \$4,000, provided that these are in some degree self-supporting by means of any of the productive opportunities incident to a moderate acreage of farming lands, a few greenhouses, orchards, asparagus or other truck beds, vines, ice-plants, granaries, nurseries, or the like. No family of six persons should aim to expend \$4,000 per year or upward in ways wholly unproductive.

It would indicate a lack of social talent or productive enterprise to do so. Such an income represents the average net earnings of \$100,000 of capital, invested in railway or manufacturing stocks, or rented real estate, over taxes, losses and services. A family possessing such an income can most economically devote its time to social functions, having for their immediate object entertainment of friends and relief from the monotony of the isolated life, and for their ultimate object the suitable marriage or alliance in business of its sons and daughters. Even on an income of \$1,600 to \$2,400, life should not and cannot be merely vegetative. Unless it is made a social altruistic success, in short, unless husband, wife and children are brought much into association with those outside the family, it will lack sweetness, become morose, and ultimately in some way fail. A proper exercise of altruistic functions and a due expenditure of income on our friends is frequently essential to maintaining the income itself. I know of one family whose deceased founder bore a name well known throughout the world. The members found their family income falling to less than the half of \$4,000 a year, and a considerable portion of this pledged as an annual salary to the gardener. Being forced to study some mode of making their joint efforts productive, they availed themselves of their gardener's skill, and their greenhouses, to enter upon the pro-

duction of roses for the New York ball-rooms. They soon had an income of \$8,000 a year. This was far better economy than to study how to make \$1,600 suffice.

Incomes can never be counted upon as constant quantities. The investments from which they are derived fluctuate in value every hour like the inconstant waves of the sea. If they are the earnings of a profession or business, they cannot remain stationary. Fate gambles savagely with the opportunities, the demand, the public taste, the cost of production, and even the lives, on which they depend, and with the changes in which they increase or disappear. Salaries must vary with employers' profits and the competition of employees for places. It is more practicable even to double an income than to keep it stationary for life or even for a decade.

Wherein may scientific organization be brought to bear to simplify the duties of a housekeeper, and bring her work to the highest perfection with a minimum of effort and expenditure?

First. She must utilize the time and faculties of every competent person in the household, whether husband, visitor or child, by "bossing" them instead of enslaving herself. There will be enough left for her to do after the others have done all she can get out of them. If her four children are sixteen, fourteen, twelve and ten years of age, respectively, and she resides in a large city, she can get good marketing or shopping done by any of these by explaining clearly what she wants, handing the child the maximum sum of money required to buy it, and allowing the child as a commission the difference between this fair price and what the child can get it for. Nearly always the child will learn a deal about buying, and return with as good an article and yet earn its commission. The notion that children will be made sordid by learning how to trade too early is an error. Children are made sordid, selfish and worthless by not being taught early how to make money their servant, instead of always finding it their master.

Second. To utilize the faculties of all, all must either rise early or sit up late, and must be kept "on the spin"—i. e., in action constantly without an idle hour—from the

moment they awake at or near dawn until they fall asleep in their beds at night. If a visitor comes and boards with you beyond a single meal, or stays with you beyond a night, utilize him. Let nobody rust, or dawdle, or loaf, or shirk. This requires tact and habit. If he sits down at your table, ask him to do you the favor to carve. If he has never carved before, it will open up a new world to him. If you live in the country and have a garden, ask him to pick the berries or the beans, or catch and harness the horse, or bring the water from the spring. Politeness is never violated, but on the contrary is heightened, by utilizing all friendships and giving prompt employment to all affectionate people who visit you because they enjoy your culture. If your guest is a woman and you are washing, invite her into the kitchen, and she will certainly offer to pin the clothes on the line. The chief of a household must accept no service from the humblest member of it without officially, and as a debt, thanking the person who renders it. This is a mark of nobility, and its covert denial that the service is paid for when in fact it is, is of the very essence of dignity. No beginning can be made toward home "sweetness" without it. Terms of endearment, pet names, an overflow of studied praise, gestures and finger-touches of graceful and affectionate recognition, are the coins in which reciprocal services within the family circle are paid for. No household can be thoroughly utilized and stimulated to its best work in the absence of these marks of social tone and gentle breeding. The failures in life seldom render them. Successful and really noble or intelligent people seldom forget them.

Third. Never trust to memory for details of organization and supply. Keep your memorandum-book or diary with half a page for "things needed" and another half for "things to be done." Transfer to next day's page the things not done and by the number of times one entry is re-

peated you arrive at a measure of your own dilatoriness. When you see any member of your household moon-gazing, look at your memoranda. They will help you to utilize the moon-gazer.

Fourth. Make your home jolly, if you want it to be industrious. Never scold or find fault as an afterthought, at finding things not done which you have not yourself clearly foreseen and ordered in advance to be done. Servient minds are necessarily simpler, and think of fewer things, and think on fewer sides of the same thing, than dominant minds. Never blame a person for lack of capacity when he sees it as soon as you do and both see it too late. Stanley found in Africa that a negro must be ordered to do only one thing at once. In a less degree, simplicity must characterize all orders.

Fifth. Keep economy in mind on your pleasure-trips.

Sixth. To save time in thinking what you will have for dinner, make up a schedule of all meals for two weeks ahead, diversifying it so that the same leading dish will not repeat itself within a week. This will save hours of doubt, and will prevent your table from being that monotonous and thoughtless routine which invites disgust, provokes dyspepsia and causes diminished intellectual versatility and power.

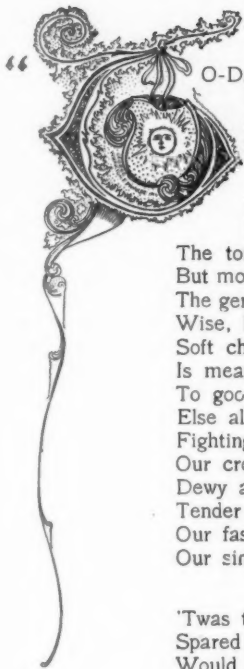
Make up like schedules of social objects worth compassing, friends worth knowing or entertaining, and books worth reading. Then work on the schedules as to subjects, dates and quantity. Housekeeping becomes thoroughly practical only when it is pursued with high ideals. To those who put forth the effort and adopt the system essential to the best results, it ceases to appear a struggle or a sacrifice. It is a passion and a pleasure because it is at once a perfect home and a happy environment. To those who scrimp the effort and deny the system, it becomes an unflagging toil, like that of the wanderer, without a home or sweet fireside, who

"Drags at each remove a lengthening chain."



A VINDICATION OF EVE.

BY RICHARD LE GALLIENNE.



O-DAY," the Canon said, "our text shall be
In Genesis—the whole of chapter three;
Also I ask you in your minds to fix
St. Matthew's gospel, chapter four, verse six."

Young was the Canon, exquisitely grave,
Learned, and subtly skilled by lovely words
The tortured souls of men to soothe and save,
But most the gentle souls of women knew,
The gentle souls of women shy as birds;
Wise, kind and patient. "Not for me and you,
Soft children at this southern end of Time,
Is meant the antique, stern and difficult climb
To goodness—ours a greener, softer way,
Else all in vain the ancient fathers died,
Fighting the dark that we might have the day.
Our crown of thorns shall on a May-bush grow,
Dewy as yet, and prickly but in play,
Tender and green, with roses in a row.
Our fasts like feasts shall all a-singing go,
Our sins quite painlessly be crucified."

'Twas thus the Canon with a flowering rod
Spared his frail flock, and as the ancient plan
Would reconcile the ways of God to man,
He reconciled the ways of man to God.

"Friends," he began, "'tis fair Cecilia's day,
Hers in whose soul the love of mellow sound
Mated the love of God, and found a way
To make the very wood and wild winds pray;
And, as Angelico taught first to save
The soul through grateful pleasure of the eye,
Painting the earth in colors of the sky,
Cecilia first of saints it was who gave
Salvation through the heavenly-minded ear—
Music that brings the very angels near,
Music, the very voice of very God.

"'Tis through this thought, that from a woman came
Of sacred sound the Promethean flame,
That I would prompt to deeper gratitude
Your pondering minds, and ask you dwell with me
On Genesis—the whole of chapter three.

" The sacred scriptures are not well divined
By a too literally pious mind.
Words for so vast and intricate a scheme
Are but a sort of parabolic dream
Waiting the skilful sweet interpreter.

" God never meant His sacred word to mean
Just what mere reading needs must make it mean,
Else God's own book must God's own works deny.
And men were never saved by ear and eye.
He spoke in riddles lovely and profound,
In epigrams divine of sight and sound;
Read these aright, there is no good below
To which the scriptures give a churlish 'No.'

" Of all the sacred writings, Genesis
Claims the most arduous exegesis,
And sacred writers have indeed been fain
To call in here the help of the profane;
Of all its sacred chapters none more dark
Than that which I have asked you read and mark;
Never more necessary could it be
To understand God's words by contrary.
Is it a challenge to the pious mind
To read God harsh and yet believe God kind?
Is it a test severe the soul to try,
Faithful to truth, though God should truth deny?
But let us more particularly scan
This curious fable of the Fall of Man.

" God set a tree within a heavenly land,
And upon Adam laid this strange command:
'Of all the other trees that herein grow
Eat thou thy fill, but of this mystic tree
Eat shalt thou not, for, eating, thou shalt know
Evil from good—which were not well for thee.'

" Then Adam by the will of heaven slept,
And from his side, as from some rocky cleft
Of the stern hills, a child-eyed woman stole.
Up, like a flower, from Adam's side she grew.
Then Adam, waking, all his future knew,
And Adam thus became a living soul.

" Then Adam called the new-born woman 'Eve,'
And the one law of that strange Eden told:
How of all trees, one only must they leave,
The mystic tree with apples bright as gold.

" Far across Eden strayed the feeding herds,
Content to move head down to the sweet land

And Adam watched them, happy even as they;
But Eve oft pondered on that strange command—
'Evil and good!' Strange meaning to strange words!
'Evil and good' that she must never dare.

"Now in that garden dwelt a serpent fair,
Silver and gold and jewels to the eye,
And to the ear sweet-tongued as dulcimer;
Wise too was he, wise as the stars in sky;
And unto Eve, that loved his wisdom well,
Often, while Adam slept, tales would he tell
Of the strange world, and once it chanced that he
Told her the tale of that forbidden tree.

"'Fear not to eat,' he said. 'Tis but God's way,
Forbidding, but to tempt us to the tree;
Who is not wise enough to disobey
Is all unworthy of that tree to taste,
Which whoso tastes as God himself shall be.'

"Thus ate the woman and the Fall began,
This curious fable of the Fall of Man.
Fable, say I, yet fable still I hold
Hinting some truth more precious than fine gold—
Truth so distorted, fable so awry,
That 'tis with some timidity that I,
By pious criticism, re-create
Its ancient meaning unsophisticate.

"First then, consider the divine decree.
Can we, with finite minds, believe that He
Who bids us watch and pray with all our prayers
Lest we should do the evil unawares,
Should, of all trees, forbid that virtuous tree
Within whose sap so rare a knowledge ran?
Had God forbidden all the trees of the wood
Save only this of evil and of good,
Tree so medicinal for the soul of man,
Bade them on this alone forever feed,
'Twere still decree mysteriously decreed;
For God, our riper wisdom has revealed,
Denies not any flower of any field,
Nor any fruit that hangs on any bough—
Still 'twere less strange denial of His plan,
Nor had we questioned—reverently—as now.

"Then, if you read near to the chapter's close,
God had great fear lest they should also find
The Tree of Life, which in the garden grows,
And whoso eats thereof shall never die.
Surely our sacred duty is most clear,
For love of God to doubt His scripture here—

Scripture that would the very truth deny
 On which the fairer half of scripture turns,
 Make God Himself give God's own Son the lie,
 Who to the meanest thing of all that lives
 Eternal life a free salvation gives.

"How came such errors in the sacred text
 Is a consideration deeply vexed—
 One too profound, my friends, to ponder here:
 Error there is, suffice it that is clear.

"Now for the moments brief that still remain
 I turn to make my deeper meaning plain,
 And I would strive to right, this Sabbath morn,
 A misconception through the ages borne:
 For by this fabled Fall I hold is meant,
 Not then the Fall of Man, but his ascent;
 And what so long has seemed the woman's shame
 I hold her chiefest glory and fair fame.

"Had not the woman dared to disobey,
 Adam had still been Adam to this day,
 Living his life in meek stupidity;
 Man's slower spirit had remained unstirred,
 And God's great harmonies had passed unheard.
 Ah! what a different world, my friends, had been,
 Had Eve, like Adam, been content to lie
 And watch the herds, without a thought between.
 Praised be the snake, which seems to typify
 That wit in woman, which, with instant sense,
 Divined the meaning of Omnipotence,
 And by her disobedience best obeyed.

"Thus, in measure high, we our salvation owe
 To her, by whose brave act alone we know
 Evil from good and joys that never fade.

"Much blessing else that in the golden rind
 Of that mysterious fruit awaited Eve,
 I must to your own meditation leave—
 The blest word Woman perhaps includes it all.
 For Adam knew not love until the Fall,
 Save as the steer dimly knows its mate;
 He knew not wonder, knew not ecstasy,
 Knew not the special thrill of human fate;
 Nor had he ever felt the sting to rise
 From man to angel, and to purify
 His soul to meet the woman's innocent eyes;
 Nor art, nor science, save for Eve, had been,
 Nor more than beastlike joy, nor love divine
 Of wife and husband, nor the fair design,
 Heavenlike, of home—yea! all this good had slept
 Had Eve the literal commandment kept."



MOHAMMED

:ABU BEKER:

The Building of an Empire.

BY JOHN BRISBEN WALKER.

TO the last Mohammed remained a singular admixture of good and evil, of craft and wisdom. Like every human character, his combined weakness and strength, good intention and bad execution, high aspiration and low action. When untempted, a man of the highest ideals and purest impulses, Mohammed gave himself, when temptation offered, to inconsistency, and even cruelty. Yet his influence on the whole made for good. Compared with present-day ideals, it was bad; but it must be remembered that it took up the place of something worse.

Syed Ameer Ali, whose biography of Mohammed is that of an all-admiring enthusiast, gives this picture of his simple life: "He visited the sick, followed any bier he met, mended his own clothes, milked his goats, waited upon himself. His hand was the most generous, his heart the most courageous, his tongue the most truthful.

He was the most faithful defender of those he protected, the sweetest and most agreeable in conversation: those who came near him loved him."

Ameer Ali's book, "The Spirit of Islam," was written in Calcutta, "with the hope that it may assist the Moslems of the British empire to achieve their intellectual and moral regeneration under the auspices of the great European power which now holds their destinies in its hands." Ameer Ali, an educated Moslem, might well have written the more than six hundred pages which he has devoted to his task in an effort to bring before the mind of the Christian reader this one accusation: "No religion of the world prior to Islam had enrolled its principles among the positive enactments of its system." He might, with equal justice, have brought his charge up to date. No Christian nation up to his time had ever

attempted to make its legal and social system correspond with the teachings of Jesus Christ. From the pulpit we have had for eighteen hundred years beautiful doctrines of love and charity, while the laws of business and the laws governing social requirements have come down to us almost unchanged and in unbroken succession from the most brutal of pagan times. The student of laws may in vain search the speeches of Christian lawmakers, since they began to be recorded, for any attempt to mold a system of society upon the teachings of Jesus Christ. Injustices have been lessened, the condition of the unfortunate has been alleviated; but these tasks have been done at the instigation of self-interest. It is even possible to go farther and say that no Christian lawmaker or writer has ever undertaken to work out in detail, even by way of suggestion, a code of laws which would closely conform to the teachings of Jesus Christ. This task has remained for the twentieth century, and will engage, above all others, the intellectual conscience of its people.

It is interesting to note the indictment of this Moslem against Christian conditions as they prevailed at the time of the Hegira. Ameer Ali declares that as the result of six centuries of this teaching of Christ's doctrines without an effort to embody them in the laws, there was at the time of the coming of Mohammed "in the West, as in the East, a condition of the masses so miserable as to defy description. They possessed no civil rights or political privileges. These were the monopoly of the rich and the powerful or of the sacerdotal classes. The law was not the same for the weak and the strong, the rich and the poor, the great and the lowly. In the Byzantine empire the clergy and the great magnates, courtesans and other nameless ministrants to the vices of the Caesar and proconsul, were the happy possessors of wealth, influence and power. The people groveled in the most abject misery. In the barbaric countries—in fact, wherever feudalism had established itself—by far the larger proportion of the population were either serfs or slaves. Villeinage or serfdom was the ordinary status of the peasantry. At first there was little distinc-

tion between predial and domestic slavery. Both classes of slaves, with their goods and lands, belonged to the lord of the soil, who could deal with them at his own free will and pleasure."

But three events of importance remain to be considered in Mohammed's career. The first was the expedition dispatched against Muta in Syria. With increased power, Mohammed's ambitions had grown. It has been already told how he sent ambassadors to Egypt, to the Emperor Heraclius and to Persia. One of his ambassadors on the way to Bosra was put to death by the Governor of Muta, which is two or three days' journey east from Jerusalem.

The command of the expedition which was forthwith fitted out was committed to Zeid, who not only had given proof of his devotion by surrendering to Mohammed his beautiful wife, Zeinab, but had, in the course of years, developed into a determined and able leader. Mohammed's cousin, Jaafar, son of Abu Taleh, and brother of Ali, with Abdallah Ibn Kawaha, the poet, accompanied Zeid as his personal staff. Khaled, the new convert, who had volunteered in the hope of rendering service, was also with him.

The importance of this expedition cannot be overestimated, when we consider that it was the first put forth by Mohammed against the Roman power. The Roman Governor had gathered near Muta a greatly superior force. The hope of taking the city by surprise proved vain, but the Moslems, notwithstanding the disparity of forces, immediately engaged the enemy. Early in the battle Zeid fell, fighting with the sacred banner in his hands. It was raised by Jaafar and carried toward the enemy until the hand holding the staff was cut off by the stroke of a simitar. Immediately Jaafar seized it in his remaining hand, and when that was severed embraced the banner between the bleeding stumps, until his head was cleft open by another blow. The standard was then raised by Abdallah, the poet, and when he too fell, it passed into the hand of Khaled, who rushed into the thick of the enemy, cutting down with terrific saber-strokes all who opposed him, and held the field until night put an end to the conflict. Tradition has

it that Khaled broke no less than nine simitars over the heads of his opponents; which, while speaking well for the bravery and strength of Khaled, gives but a poor idea of the blacksmiths and forgers of that period.

When morning broke, Khaled, recognizing his desperate situation, resorted to strategy. He marched and countermarched his few troops behind rising ground until he had intimidated the enemy by the sight of imaginary numbers who, supposedly, had reinforced him during the night. Dispirited by the sight of the increased numbers of the enemy, the Romans broke at the first charge and presently were completely put to rout. The Prophet, while giving thanks to Allah for the victory, bestowed upon Khaled the title of "The Sword of God."

The confidence felt after this expedition determined Mohammed to surprise and capture Mecca. Ten thousand men under his personal command set out. The first encounter was with Abu Sofian, Mohammed's most bitter enemy. Having been captured and brought before the Prophet, he was pardoned upon condition that he make profession of faith. "To convince the unbeliever, argue with the sword," is a Moslem maxim, and it proved efficacious in the conversion of Abu Sofian.

After but little opposition, Mecca surrendered, and Mohammed entered its gates with great pomp and ceremony. The three hundred and sixty idols in the Caaba were thrown down and destroyed. At this time was established a custom which has come down to the present day. The city had been entered at sunrise. At noon one of the Prophet's followers, from the top of the Caaba, in a loud voice summoned to prayer the entire army. Twelve centuries later the Christian traveler finds the Moslem priests ascending the minarets of the mosques to call believers to prayer in perpetuation of the custom.

Grown bold by success, the victors set on foot another great expedition against Syria. As the preparation went forward, Mohammed's strength grew feebler. A low fever, under which he had lingered for many months, had gradually reduced his strength. Recognizing that his death was a matter of

not many months, he resolved upon a final pilgrimage to Mecca. He called together a caravan, estimated by some records as having contained more than one hundred thousand people brought under one flag by their devotion to the Prophet, and moved forward, this time in a state that would gratify the fullest vanity of the man who a few years before had gone forth in the night from Mecca in fear for his life.

Mohammed would have been more than human had he not taken the greatest satisfaction in this return as a master, accompanied by every circumstance of power and popularity, to that home of his youth and middle age in which he had been insulted and from which he had been obliged to flee in secrecy.

Something of Mohammed's oldtime earnestness and sincerity seems to have returned to him as he mounted the pulpit of the Caaba. Day after day he addressed his followers and sought to impress indelibly upon their minds the chief tenets of the faith he had devised for their guidance. But his preaching was now of the higher ethics. His power was no longer questioned, and he could afford to drop subterfuge.

On his return to Medina, the fever took stronger hold upon Mohammed. Unable himself longer to preach, he sought to substitute Abu Beker. His one son had died a short time previously. One of his reasons for the number of wives taken was the hope of leaving a race of successors. Strangely enough, but one son, Ibrahim, had resulted from these many unions.

At the death of Ibrahim, Mohammed gave way, for the first time in his life, to the greatest grief—to such an extent, indeed, as to scandalize his followers, who could not understand why the Prophet should so grieve over the passing of his son to that heavenly happiness which Mohammed had averred to be infinitely beyond the power of human words to picture.

Too sick to preach, he requested Abu Beker to take his place. His followers seeming to resent the appearance of Abu Beker in the pulpit, Mohammed went behind and repeated the prayer after him, probably hoping thus to prepare the way for the successorship of a man whose wisdom and generous qualities all seemed to unite in prais-

ing. When finally the Prophet recognized that he was on his death-bed, he gave his slaves their freedom—a species of generosity which has been practised by many men before and since.

Not so much, even, can be said with reference to the incident in which Ayesha was concerned at about this time. She became seriously ill. Mohammed, standing at her bedside, suggested that she take no pains to recover, but accompany him to that paradise for which he himself would soon set forth. "What!" exclaimed she, "die and have you perhaps recover and return to live with your other wives?" The very thought was sufficient to cause her speedy recovery, and after closing the Prophet's eyes, she lived to become a female politician of great ability and to play an important part in determining the future of the Moslems.

Mohammed died in the six-hundred-and-thirty-second year of the Christian era, the sixty-third year of his age, and the eleventh year of the Hegira. He seems to have been destroyed by the fever because of the lack of even the slightest knowledge of medical science—the victim of the ignorance of his attendants as to the simplest natural remedies for the disease, as indeed George Washington was nearly twelve hundred years later.

So died the founder of a religion which, owing to the clear understanding that Mohammed had of human ideals and human frailties, holds so strong a sway over many tens of millions at the close of the nineteenth century. Mohammed saw his problem and met it with a perfectly vigorous mind. He devised an ingenious system which catered in turn either to every sentiment or to every passion of man—to his courage or to his fears; to his highest ideas of altruism or to his basest desire; to his intellect or to the superstition which covers the lack of intellect. It was all-embracing in its power and in its recognition of the poor and the rich, the weak and the strong. It was made a catch-all, and in its sweep took in every inhabitant of the countries which were compelled to acknowledge its sway. That it was lasting, is proved by the fact that at the end of twelve centuries its followers number more than one-seventh of all the people of the earth.

Politics in the modern sense was unknown to the children of the desert. Undoubtedly the strength of Islam at this time rested in the strong men who had grown up on the unkindly sands and had stood at the side of Mohammed in the various emergencies of his life. Eating little and thinking much, having the utmost contempt for riches, intellectually intent upon the problems of government which had been committed to their charge, grown fanatical in faith, fearless and determined in action, this little group of men constituted, probably, the most wonderful force that the world has ever seen. Had Napoleon possessed such material instead of the vain, self-gratifying, not over-scrupulous men out of whom he was compelled to manufacture marshals and generals, he would have conquered the world. Then his unresting brain, released from the cares and hazards of campaigning, would have organized a social system which would have advanced civilization by a hundred years.

Downright scheming would have immediately discredited any of the men who were the probable successors of the Prophet. But, so far as one may judge, their motives were very simple. Consequently the death of Mohammed threw everything into momentary confusion. It appears to have been taken for granted that, supported by the direct intervention of Allah, Mohammed would live forever. There was almost universal surprise expressed at his death. Even Abu Beker seems to have felt called upon to wonder that Allah should have seen fit to remove his vicar.

In the confusion which followed, the animosity of rival sections asserted itself. Each of the two principal tribes claimed the right to have one of its members as the Prophet's successor. Then the proposal to divide the authority was made, and for a while trembled in the balance, and with it the fate of Islam.

Had not Raab, the son of Malek, seen the bloody head of the wounded Mohammed sticking from beneath the pile of corpses in the ditch at the battle of Ohod, the story of Islam would not have occupied twenty lines in history. So now only the wisdom of Abu Beker saved Islam from a

fatal blunder which in all likelihood would have quickly dispersed the followers of the Prophet into an obscurity from which no further tidings would have ever come.

"You cannot put two swords into a single scabbard," was the quaint figure of Abu Beker that brought instant conviction to every Moslem. Omar and Abu Obeidah stood near by, both wise and strong men. "Take either of these," exclaimed Abu Beker, turning toward them. The disturbance had arisen unexpectedly; the emergency had to be met. There seems to have been no previous arrangement toward such an end.

Omar was one of the five men most prominent about the Prophet, and the father of Hafsa, one of the Prophet's wives. Most prominent of all at this time stood Ali, a cousin of Mohammed and the husband of Fatima, the Prophet's only living daughter. But Ali was at that moment engaged in assisting his sworn enemy, Ayesha, in putting the winding-sheet about Mohammed's dead body. Ayesha seems to have been the cunning politician of the time. She may have purposely brought Ali to her assistance with the idea of removing him from public view at what she recognized to be a critical moment. She carried even to her grave the recollection of Ali's doubts concerning the early morning incident with Safwan Ibn al Moattel.

Othman, another of the five, had married in succession two daughters of the Prophet; but both were now dead. Abu Beker was probably regarded by the Prophet as the wisest and most trustworthy of those who would be considered for the successorship. But the intimate relations which the Prophet had sustained with the entire five, probably made him unwilling to take any active part in preparing the way for the succession, even though such inaction might result in the ultimate wrecking of the Moslem faith itself.

The invitation extended by Abu Beker to choose between Abu Obeidah and Omar did not lessen the confusion. Weapons were drawn, and for a time it seemed that a desperate affray would be precipitated which would permanently sever the followers of the Prophet into two parties. At this critical moment, Omar, who seems to have been the beau ideal of a soldier—

handsome and vigorous in body, quick and determined in mind, unselfish in action—stepped up to Abu Beker, and seizing his hand saluted him with: "Thou art the one whom the Prophet selected to lead us in the pulpit. I give thee my allegiance."

It was all very natural, and apparently without the slightest design other than the desire to serve the greatest good of the nation. Yet, in after-days there were those who were able to detect sinister and unworthy motives in the generous action of Omar; just as to-day in the Emperor of Russia's disarmament plan, every meager and narrow mind finds suggestion of unworthy motives.

After the selection of Abu Beker, the funeral of Mohammed was proceeded with. With much discussion, the decision was reached that his grave should be dug beneath the bed on which he expired. This was in the room of Ayesha. After the burial a slight partition was put across one end of the room, and Ayesha continued to occupy the portion thus cut off. Later on, her father, Abu Beker, was buried beneath the same floor, and, in course of time, Omar. Until the burial of Omar, Ayesha visited that portion of the room above the Prophet's grave unveiled. After the burial of Omar, she never entered without the full dress prescribed by Moslem etiquette for the presence of a stranger.

No sooner was the Prophet's body underground than Abu Beker set about carrying out the plans for the campaign in Syria, which had been interrupted. He rejected both the titles of King and God's Vicar on Earth, choosing that of Caliph, or "Successor." In many other respects he was an ideal man, and his life might be studied to advantage in these modern times, though it is to be feared that it would receive but little respect from the man in office.

When Abu Beker entered upon his duties, he required Ayesha to take stock of all his worldly possessions, which were probably, all told, not worth one hundred dollars of to-day, in order that when he died an inventory might show that he had not used his power for personal aggrandizement; and at his death it was proved that he had never benefited personally by the vast powers and immense riches which had

been confided to him by the state. His seems to have been a truly intellectual personality. All wealth and property were to him as nothing. His clothing was of the simplest; his food only that required to keep his body in good physical condition. Any sums of money placed in his hands he dispensed every Friday, either to the poor and distressed or to those whose interests could be served to the advantage of the state.

Mohammed had made the mistake of putting the command of the expedition which was about to go forth in the hands of a very young man, not yet twenty years of age, because he was the son of Zeid. Abu Beker declined to interfere with the Prophet's appointment, but surrounded him with generals of such discretion as to insure wise counsel, and hastened his departure. He himself marched on foot an entire day's journey with the troops, refusing to make use of the horses of the generals and preferring to show his sympathy with the common soldier. Then, without escort except his friend Omar, whom he had asked to remain as his adviser, he returned on foot to Medina.

The expedition was short and successful; but even before its return, with much booty, the attention of the Caliph had been distracted by rebellions which were breaking out among the tribesmen. A false prophet had arisen in the person of Moseilma. Starting obscurely like Mohammed, he had already attracted adherents numbering many thousands; and just as Mohammed had governed both church and state in Medina in the name of God, so Moseilma had established himself in the city of Yamama.

A famous poetess of that period was Sedjah, wife of Abu Cahdla, distinguished for her great beauty as well as her mental qualities. She is described as going to Moseilma as the Queen of Sheba went to Solomon. It was a case of love at first sight, and the poetess by her charm of manner and her glowing verses contributed much to the success of the new prophet.

But Khaled, the hero of the nine broken sabers, was not one likely to be appealed to by the charm of poetry. He was the Rough Rider of that day, and when his squadrons met those of Moseilma at Akreba,

though he fought at a disadvantage as to numbers, the victory was not long in doubt. Moseilma, waned on by the lovely poetess, met his fate fighting bravely, and is chiefly remembered to-day in Arab story because of the glowing love-poems written by his adventurous sweetheart. He was probably a man of greater ability than Mohammed, and, perhaps, in every way his superior; but Mohammed never encountered a Khaled—so curious are the chances.

Abu Beker seems to have possessed a military mind, though not himself taking part in any campaign. His plans were made with the map of the then-known world before him. They were studied out deeply and thoroughly, and contemplated nothing less than bringing Christendom itself to a belief in the unity of God.

Syria with its rich cities offered, indeed, a splendid prize. It needed only the glowing verses of Arabian poets bringing before the imagination of the Moslem warrior pictures of this wonderful land where green grass took the place of blowing sands, where bubbling waters were ready to slake the thirst at every turn, where immense booties of cloths and coin and beautiful slaves awaited capture, and where, should death come, the houis of paradise stood ready to bear off the souls of the fallen, to arouse the warriors of the desert to the highest pitch of enthusiasm.

Not one army, but five armies, were dispatched. Men who had once been noted as opponents of the Prophet had now come to the front. Strangely enough, Moseilma had been struck down by Wacksa with the very spear which that Ethiopian gladiator had used to bear off the head of Hamza, the uncle of Mohammed, from the battle-field of Ohod. Now Amru Ibn al Aass, the poet whose satirical verses had brought ridicule upon Mohammed's teachings in the early days, found himself in command of one of Islam's armies. Four great divisions were assigned to Palestine, Emessa, Damascus, and the country about the Jordan, respectively. Khaled was sent to invade Irak, the ancient Chaldea and Babylonia of Ptolemy, which was now under Persian sway. The campaign thus involved an attack upon both the Roman and the Persian empires.



Drawn by Eric Pape.

AYESHA.

Moving rapidly, with but ten thousand men, Khaled fell upon Hira, the capital city of Irak, and after fierce fighting, in which the King was slain, entered the city and shipped off the heir to the throne of Irak to Medina, with the first instalment of an annual tribute of seventy thousand pieces of gold; thus establishing for the first time that system of levying tribute which afterward contributed so largely to the coffers of the caliphate.

Khaled next fell upon Aila, from which he dispatched an immense booty. Then in rapid succession he met and conquered three other Persian armies. Cities now surrendered at his approach, and in an incredibly brief space of time the whole province was under his control.

Among the immense booties sent off by Khaled to Medina was an elephant, the first ever brought to that city. One can almost envy the small Arab of that day who went forth to greet these returning caravans, and whose eyes came unexpectedly upon this wonderful trophy. Life in those times was held lightly and in uncertainty; but it had its compensations. The modern circus entering a village is a tame affair in comparison with the excitement which was attendant upon the return of warriors from the field of battle accompanied by slaves and booty.

Abu Beker, the studious planner of these victories, found great delight as, day after day, the proofs of his skill and foresight were brought back to him. Especially did he rejoice that he had recognized the great military abilities of Khaled. "By Allah!" he is quoted as swearing, "womankind is too weak to give birth to another Khaled!"

With five armies in the field, it is not surprising that success should not everywhere have attended. Abu Obeidah, who, while commanding one army, had a sort of general supervision over all the others in Syria, failed to show any great military talent. Deliberation and extreme caution are of great advantage in some of the affairs of life; but they are not distinguishing characteristics of military genius. When General McClellan was hesitating in his Potomac campaign, a member of his staff who was noted for his wit was asked for a suggestion contributing to the conduct of operations.

He wrote on a slip of paper this sentence: "While timorous knowledge stands abashed, audacious ignorance hath done the deed." He conveyed thus, not unshrewdly, one idea which must always underlie military success. A broad, vigorously thought-out, clean-cut conception of the strategic points; then action, determined action, quick action, then unceasing action until victory is achieved. That is almost the entire art of war. It was the art of war when Khaled flourished his bloody simitar around Persian heads, and it was the art of war when Dewey with extinguished lights ran his squadron past the batteries of Corregidor into Manila bay and opened fire on the Spanish squadron.

News came to Abu Beker that things were going badly in Syria. A messenger was hurried off to Khaled with news of such perilous conditions that, calling fifteen hundred horsemen about him, the Rough Rider galloped off toward Bosra, before which was Serjabil, who had been the secretary of Mohammed.

As Serjabil had approached the city, a great army had deployed from the suddenly opened gates and, attacking the Moslems with unexpected ferocity, driven them back in confusion. They were on the point of breaking before the tremendous onset when far in the rear was heard the cry of "Allah Achbar! Allah Achbar!"

As Sheridan came down upon the already retreating battalions at Winchester, so did Khaled come, well in advance of his dust-covered horsemen, swinging his simitar in air and shouting with vigorous lungs, "Allah Achbar!" The Christian warriors were driven back into the city and night closed in, the field covered with dead and the groaning wounded.

On the following morning the battle was resumed. Again the portcullises were raised, the gates swung open, and a great army marched proudly forth to combat. The wars of that day were spectacular. Men did not crawl in dull-hued uniforms through underbrush and long grass, rifle in hand, looking for a concealed enemy, or lie in muddy trenches listening to the deadly singing shot and shell. They rode forth on bravely caparisoned steeds, in resplendent garb, proudly carrying lances with



Drawn by Eric Pope.

SERJABIL UNDER THE WALLS OF BOSRA.

which they were presently to show their prowess and strength in personal combat. Wives and sweethearts stood on the wall watching them charge, and even near enough to pick out individual lovers to whom they could wave a last adieu or flutter a scarf in hailing a returning victor.

The conflict before Bosra was typical of the times. Public opinion oftentimes

called on the commanders of the respective forces to engage in personal combat, with the two armies looking on as spectators; each knight meanwhile tightening his girths and lacing his armor for his own share in the conflict which must shortly follow. Before a morning's amusement of this description, the modern bull-fight or prize-ring becomes tame and insipid. Here was hazard rousing every soul. On the personal prowess of either commander might

turn the fate of armies. Following this, each male spectator knew that he was presently to go into the arena himself to aid in reaching a final determination; and each female spectator looking on felt that before night she might be either cold in death or in the tent of a foeman.

When, then, Romanus rode to the front of his long lines of horsemen and called out

a challenge to Khaled, the event was not unexpected. Khaled was eager to respond. As he trotted slowly up to his opponent, Romanus in low, quick tones informed Khaled that he was a believer in the Moslem faith, and that he would surrender the city if Khaled would guarantee the safety of his family and property.

At the suggestion of Khaled, a mock

combat then took place, during which Khaled momentarily forgot that his strokes were to be merely make-believe, and might have put an end to the Roman Governor had not the latter called his attention to the compact. Romanus finally retreated and rejoined his forces. Calling a council, he advised the surrender of the city, but was greeted with derision and immediately deposed, and a guard placed before his house.

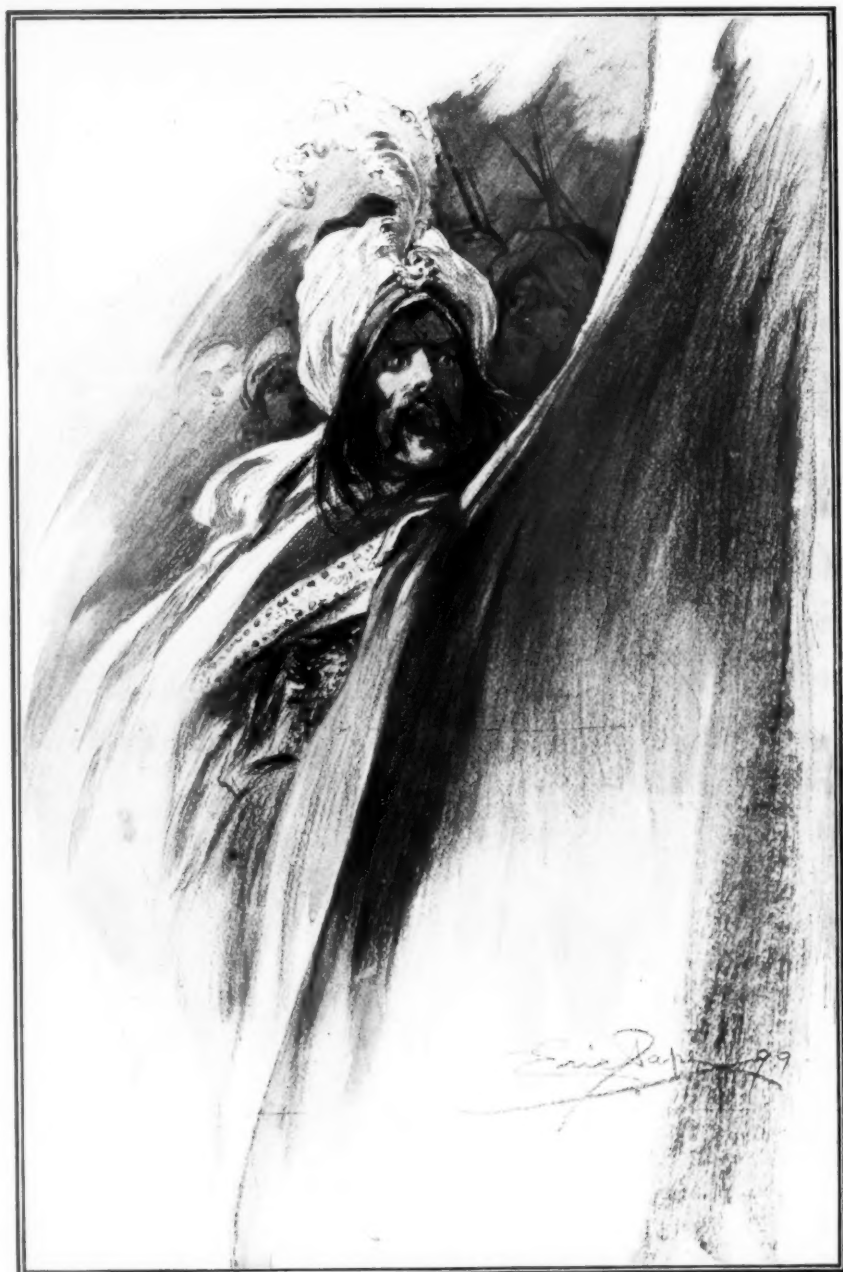
No sooner was the successor of Ro-

manus appointed, than he also rode forth in challenge. The honor of meeting him was begged by Abda'rahman, son of Abu Beker. The Caliph's son so impetuously charged the new Governor that he succeeded in driving him back into the midst of his forces, where Abda'rahman was surrounded, and would have been cut down had not Khaled, putting spurs to his horse,



Drawn by Eric Pope.

ABU BEKER.



Drawn by Eric Pape.

"WE HAVE COME TO SEND YOUR SOUL TO HELL!"

and followed by the entire Moslem force, rushed to his rescue.

After nightfall, Abda'lahman, excited by the exploit of the day, was prowling in the neighborhood of the great wall which surrounded Bosra, when he came suddenly upon Romanus. The deposed Governor explained that he had come prepared to fulfil his pledge to Khaled. The Governor's palace was built against the wall of the city, and in one place the division was extremely slight. Setting to work on this with sledges and crowbars, Romanus and his family had succeeded in removing a number of stones and making an opening into the moat. Through this opening he proposed to introduce the Moslem troops and so place them in possession of the city.

Abda'lahman did not hesitate at fear of ambush in taking advantage of the offer of Romanus. He sent off messengers for reinforcements. Then with instructions to await his signal without the gates, and taking with him one hundred men, he glided through the embrasure made by Romanus, and was quickly in possession of the Governor's palace.

Romanus had worked out a scheme of his own. He disguised Abda'lahman's men in Christian costumes, and guided them to vantage-points from which, at the proper moment, they could seize upon the city gates. Abda'lahman with twenty-five men went to the palace of the new Governor, throttled the sentries, and presently stood

before the Governor himself, accompanied by Romanus. The latter glared into the awakening eyes and whispered, "We have come to send your soul to hell!" The victim started up, but his head was struck from his body by the simitar of Abda'lahman.

Meanwhile the Moslem forces had moved, under the cover of darkness, close up to the city gates at the cry of "Allah Achbar!" by Abda'lahman; these were now thrown open, and the Christian warriors, tired by the long day's fighting, were aroused from their sleep by the clatter of the Moslem horsemen on the pavements, and the affrighted cries of the guard, who were being struck down by Moslem simitars.

The usual scenes of horror followed. Mothers, infants, warriors, reddened the streets with their blood. It was no easy task for the commander of such an army to restrain his followers after a great city had fallen, and it was some time before Khaled succeeded in recalling from the carnage those whose lust for blood had been excited by the midnight victory. All this was so long ago that the nineteenth-century mind can scarcely picture the horrors of such a scene. Even when we reflect that the warriors of that day considered themselves as entitled to reward in both blood and lust following upon the heels of victory, we can but faintly imagine these human fiends let loose in the darkness of a great city equally ready to kill or to ravish.

(To be continued.)

GIVE PEACE.

BY THOMAS WALSH.

I PRAY the gods to spare me
From this fierce love of mine,
Whose sorrows rend and tear me,
Whose joys are poisoned wine.

Godheads! take back your pleasures,
Take back your gifts divine;
And from your hearts' own treasures
Grant peace and rest to mine.

A BIOLOGICAL LABORATORY FOR WOMEN.

BY AMY SEVILLE WOLFF.

IN the year 1818 some public-spirited citizens of Philadelphia began to think that we were not teaching our children in the right way, and they established a model school for the purpose of training their teachers to perform their work in a more rational and normal manner. The idea was a good one, and to-day public sentiment recognizes the necessity for special preparation for those who are to train the youth of the nation. The question no longer is, "Shall our teachers be professionally trained?" but, "How shall they be professionally trained?"

Thus looking at the manner of education from a rational and normal point of view, it was but a short step to the knowledge of the truth that "we learn by doing," and that we can know a thing better by seeing it and by feeling of it than by merely thinking about it. Indeed, we can all remember when this idea became common among our educators, and when as a result laboratories or workrooms were established in so many institutions of learning.

Almost simultaneously with the spreading of the laboratory idea, the biological idea

began to assume a definite meaning in the minds of some sound and normal-minded men. Just as the manner of administering intellectual food to the young was formerly irrational and abnormal, so now the food itself, the subject-matter of education, was found to be dead and innutritious. And as a result of this changed point of view in the public mind, biology,

the knowledge of life, is taught in our schools from the lowest to the highest grades.

Biology means the study of life, the study of all living things; it means the story of the life of the individual organism or the story of the races of organisms. Biology means the study of the form or structure of a plant or an animal organism, that is, its morphology or anatomy, plus the

work of the organism, or its physiology. Biology means the study of the correlation and the interrelation of individuals with individuals and of races with races, and the relation of all living things to non-living matter. To pass from generalities to the realities of the day, biology means knowledge of that destructive battle being waged between the lowest organisms of the



A CASE OF SUPPLEMENTARY SPECIMENS.



AN HOUR IN COMPARATIVE ZOOLOGY.

plant world—bacteria—and the highest organism of the animal world—man. Again, biological knowledge is giving us new fruits and new grains; it is developing for world-wide use the untouched riches of tropic life, and by its agency alone can our land crops and our fisheries and our oyster-beds be protected and developed. The quickening touch of biological knowledge has placed the art of agriculture, where man “did” but did not “know,” on the sure foundation of a science. The art of healing is now guided by the science of medicine, and the art of hygiene by the science of health. Certainly when there has been applied to the facts and conditions of life a thorough knowledge of the living principles of biology, that universal desire of man for the highest happiness will be nearer satisfaction than ever it has been before.

It is in the recognition it makes of the value of biology as a study for those who intend to teach in the public schools, and the facilities it affords for such instruction, that the Philadelphia Normal School for Girls owes much of its rapid development to the front rank of pedagogical excellence during the four years it has been separated from the Girls' High School, and organized

in a new building as a purely professional school for the training of teachers.

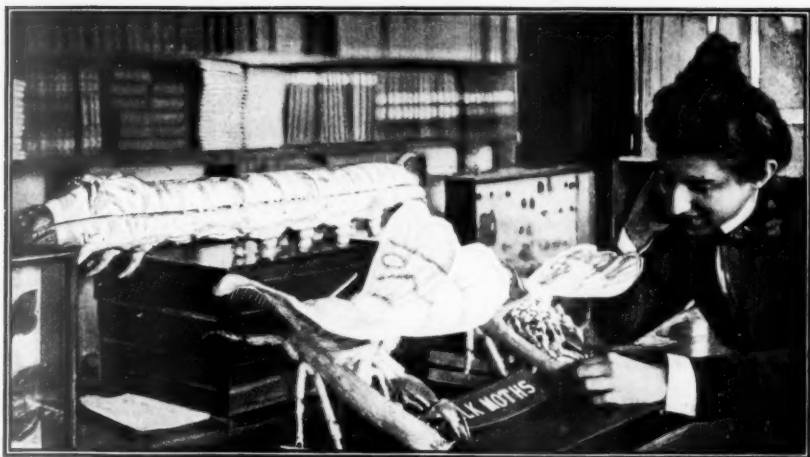
The new school has within its organization, first, the laboratories where student teachers gain first-hand knowledge of the subjects they are preparing to teach; second, the school for the professional training of teachers in the history and theory of education, and finally, the school for observation and practice. The last-named department is simply a school of city pupils upon whom the student teachers in the laboratories and professional schools put to the actual test of practice the facts and principles they have learned.

In the organization of the laboratories the workrooms have been divided according to the great natural divisions of all living things, plants and animals, into the zoological laboratories and the botanical laboratories.

In one part of the zoological laboratory are cages of birds, squirrels and mice. Stuffed birds are placed for study on the demonstration table; and for each month specimens of the principal birds to be seen in and around Philadelphia are displayed and studied. In this connection there is much valuable work for the students to do in determining the injurious and the saving effects of different birds on



THREE WHITE MICE.



FROM CHRYSALIS TO BUTTERFLY.

the vegetation of the country. Specimens and models of the various animal forms are to be seen everywhere. Among the models is an excellent collection of French and German makes; but modern science-teaching demands as well the living representatives of animals from the tiny protozoans to the vertebrates.

The laboratory of botany presents the appearance of a transplanted piece of a tropic isle rather than that of a Quaker City school-room. The room, seemingly so near the line of blue sky and white cloud, is the garden-spot of the school, a domain of green and growing things. The tables are dotted with aquaria, filled with water-plants. Splendid specimens of palms, and other plants native to tropical regions, form an emerald setting for the many bright-faced girls intent on microscopes and specimens. The botanical laboratory is no less finely equipped than the zoological laboratory with collections systematically arranged and carefully labeled. The collections begin with models of bacteria and end with trees. In an adjoining corridor are placed many representatives of the orders

of the flowering plants, as well as a series illustrating the methods of cross-fertilization. Another series of specimens shows the different methods of the distribution of seeds and fruits; another, the meaning of the parasitic plants; and there is still another series to show the various devices by which plants catch and eat animals.

From day to day the work of the students is correlated and given definiteness and material significance by means of lectures by the teachers, illustrated by lantern slides and dissections.

No small part of the efficiency of the



WITH THE BOTANICAL MODELS.

biological laboratory comes from its connection with the school for observation and practice. From the laboratories and the department of professional training, the student teachers pass to the actual school of practice, where, under the guidance of competent instructors, they teach the simpler truths of nature to children.

The young pupils begin to study in September the wind and clouds, the autumn plants and insects. Excursions are taken at different times of the day to study the direction and velocity of the wind, and the formation of the clouds. The plants taken up in September are the com-

mon wild flowers; and the most familiar insects, their habits, what and how they eat, how they breathe and move, are studied. The work for October continues the study of the wind and clouds, the sun, the flowers and insects, and begins the study of fruits. In addition to such fruits as may be

found on the trees in the neighborhood, the children study, from the point of protection and distribution, the chestnut, the apple, either burdock burrs or stick-me-tight, the maple, the ash or the ailanthus. The principal animal studied is the English sparrow. In November, in addition to a continuance of the study and observation of the wind, clouds and sun, the study of the moon begins. Obviously the preparation of plants for winter is the subject for botanical work in November, and animal preparation for winter affords another delightful as well as seasonable

subject for the children. In December lessons are given on the stars. The first snow-storm provides inspiration for a lesson on the snowflakes. The holly, the mistletoe and the Christmas tree are saved for the lessons just before Christmas, and the aquarium is the center of interest during the lessons on animals. In January the subjects of evaporation, boiling and condensation naturally present themselves; the study of the germination of seeds begins; the children become acquainted with the crow, owl and woodpecker. In February the lessons on evaporation, boiling and condensation are reviewed in connection



LEARNING TO USE THE MICROSCOPE.

with the talks upon cloud-formation, rain, snow, hail, dew and frost. In addition to the observation of the growing seeds, such experiments are performed as will demonstrate to the children that the seeds are alive. The children's circle of bird acquaintances grows. In March lessons are given on the

buds, branches of the cherry, horse-chestnut, poplar, and other desirable varieties being gathered and preserved in slightly warmed water in the school-room, where the children take great interest in watching the buds develop. The seeds which were planted in January on mosquito-netting tied over tumblers of water, by this time are growing and flourishing and ready to be planted in earth. Then begins the study of soil, the children learning and working with soil in general, Philadelphia soil in particular, and the gneiss and mica schist, and other rocks



AN UNWILLING SUBJECT.

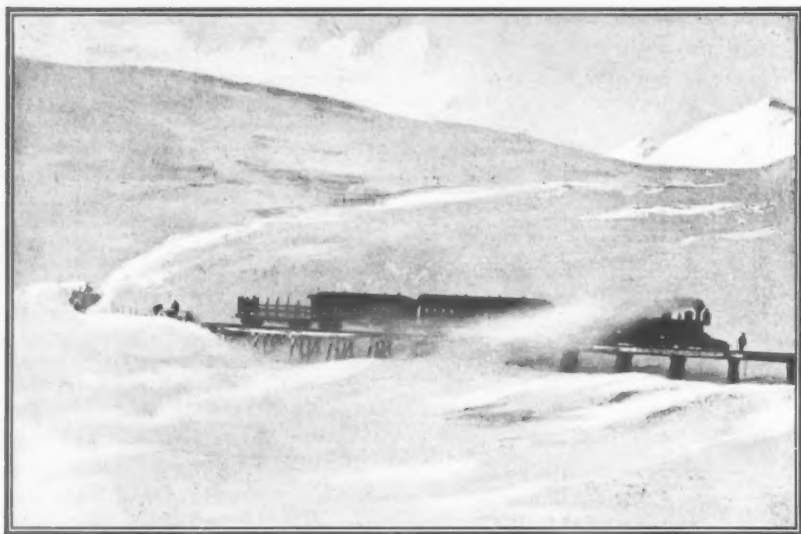
from which it is derived, together with granite, of which the school building itself is made. This work is pursued during the succeeding months, so that in June the children have learned to recognize at sight the rocks mentioned, their differences and consequent uses; the quartz family, of which they have studied carefully some half a dozen of the ordinary kinds, with their uses, and the feldspar family. The evolution of pebbles as well as of soil has been made clear.

Along with the rocks have been studied

buds, the trees, the spring animals—the earthworm, moths and butterflies—and the early spring flowers. Twenty-minute excursions around the school-house have been taken frequently, to see the granite, mica schist and gneiss of the neighborhood; to pick up the castings of the earthworm, the flowers of the poplar; to note the progress of the bursting buds and to watch the sparrows in their work of nest-building, not only in the holes in the trees but also on ledges in the surrounding buildings.

The question may be asked why the teaching of biological subjects should be carried on in connection with the professional training of teachers. This somewhat unique combination of method and subject-matter will, however, be readily understood if we try to realize more fully the extent of the demand for biological instruction in the public schools. The Philadelphia Normal School, with its biological laboratories, has generously undertaken the task of supplying such instruction, and in the extent and excellence of its work furnishes an inspiring revelation of the improved educational advantages which now lie within the opportunity of girls who desire to prepare themselves for the profession of teaching. For the success of the whole enterprise sufficient credit cannot be given to the committee of the Board of Public Education charged with the interests of the school, and to many outsiders whose sympathy with the institution is as well placed as it is appreciated.





A RAILWAY TO THE KLONDIKE.

BY W. M. SHEFFIELD.

FOR less than three years streams of humanity have been pouring into the interior of Alaska. The soil of that country, with that of the adjacent northern portions of British Columbia and the Northwest Territory, is now considered as among the most precious of the earth, and its sections are in eager demand on the exchanges of New York, London and Paris, bought and sold with greater facility than has ever been the case with the mines of South Africa and Australia. Up to the time that gold was discovered in the now famous Klondike valley, little was known of Alaska, even by the government authorities at Washington. Official information was obtained through the revenue cutter service, and with inadequate means at its disposal, its reports were known to be inaccurate, and the government maps to show an incorrect coast-line.

When it came to the interior, it may be said that the topography was largely a matter of the map-maker's imagination, but there was no one to challenge it. Several men penetrated the territory in the early years of our occupation, but their

reports told little that could be used as a basis of accurate statement. In later years a few adventurous individuals ascended the Yukon from St. Michaels, others crossed Chilkoot pass and descended the river by the chain of lakes. Most of these pioneers sought the solitude of the north as a result of failure and disappointment, or were driven from civilization because they were no longer useful members of society. What white men they found in Alaska were descendants of the hardy Hudson Bay trappers and hunters, who had formed a chain of settlements throughout the country at the time of Russian occupation or immediately after the purchase by the United States. But these men cared little for and contributed nothing to a knowledge of our great possession in the north. We did not learn to know Alaska until it became worth while, until its secret was wrested from the soil, and it became the great magnet for the world's unstable population.

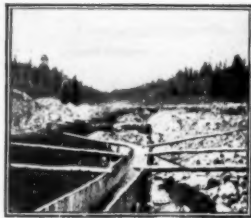
There are large sections of Alaska, on the mainland, in the interior and on its many islands, suitable for agricultural pursuits—an economic fact upon whose appreciation

the proper development of the country depends. Alaska must not be simply stripped of its mineral treasure; this must help to enrich the settler, and afford him opportunities of molding the country in ways that will soonest bring it the joys of civilization.

The soil of the country is rich and its valleys are luxuriant every summer with waving acres of wild hay. Experiments have demonstrated that the hardier cereals and all manner of vegetables can be raised with profit. A government agricultural station has been established at Sitka for experiment, and its reports have been most encouraging. The long days of summer sunshine—when the sun is below the horizon only an hour out of the twenty-four—cause vegetation and cereals to develop with great rapidity. It is not a question of days or weeks with their growth, but simply a matter of sunshine and light. The hundreds of islands of the Aleutian peninsula will some day be dotted with farms and stock-ranges, while the interior is capable of supporting an affluent population. There will come

a time when Alaska will be one of the wealthiest possessions of the American domain.

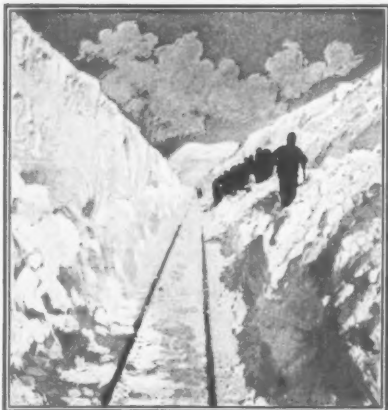
On July 19, 1897, a steamer arrived from the north with about a hundred and fifty Klondikers on board, their great buckskin sacks almost bursting with gold dust and nuggets. All had money, and several of them had each over a hundred thousand dollars' worth of the precious yellow stuff. Within twenty-four hours the news had spread all over the world, and the rush to the new Eldorado set in immediately. Miners came from England, France, Germany and Spain, while South Africa and Australia gave up their prospectors by the thousand. The mining regions of the United States were threatened with depopulation. Chilkoot pass and Dyce, the route selected by the Indians for



FIRST SLUICE-BOX ON PINE CREEK.



ARRIVAL OF THE FIRST PASSENGER-TRAIN AT THE SUMMIT OF WHITE PASS, FEB. 20, 1899.



THE ROAD-BED NEAR THE SUMMIT.

years in their journeys from the coast to the interior, were finally abandoned by the majority of the immigrants; White pass, with Skagway as the port of entry, became the favorite route. This was seen to be the logical path for the iron horse to make his entry into the Yukon valley, getting over the range at the lowest altitude. English and American capitalists soon had their engineers on the spot, and the work of building the White Pass and Yukon railway followed close upon the preliminary surveys.

The route starts from Skagway, traverses White pass, descends into the Yukon valley by way of the chain of lakes and ends at Fort Selkirk, on the Yukon, over three hundred miles from Skagway. The twenty miles between tide-water and the top of the pass presented a problem of great difficulty. In this there is a rise of two thousand eight hundred and fifty feet, nearly all of which must be overcome in one part. The distinguishing feature in accomplishing this is the employment of many sharp curves, built with great skill on shelves in the face of the rock. By this means a maximum grade of 3.9 per cent., or two hundred and six feet to the mile, has been obtained. Few railroads not depending on the cog can boast of such a steep gradient.

Begun in the spring of 1898, the work steadily advanced under a force of one thousand five hundred workmen, and in days twenty-two hours in length. On the 20th of last February the first train

arrived at the top of the pass, and the terminus at Fort Selkirk will probably be reached before the close of this year. The road is a single-track narrow-gage, and its equipment is light, but its mission is a merciful one, and puts an end to the terrible discomfort and danger of the overland route to the new Eldorado. So far the cost has been excessive, something like sixty thousand dollars a mile, but the very difficult conditions met with in the beginning will disappear in the descent to Fort Selkirk, and the construction consequently will be much cheaper.

There have been many who have predicted an extension of our railway systems along the western shores of this continent to confront a similar extension of the Trans-Siberian on the opposite shores of Bering strait. All things considered, it is quite safe to say that through trains from San Francisco to St. Petersburg are not of the near future. The White Pass and Yukon is not to be thought of as the first link of a scheme at present impracticable. For some time to come it will be a modest affair, and would fail for lack of sustenance were it not for excessive passenger and freight rates. One may ride on its cars for twenty cents a mile, or ship freight at charges equivalent to one hundred dollars per ton between Chicago and New York. The development of the country through which the road will pass will soon reduce these high rates. At all events, they are so reasonable in comparison with those of the Indian packers, who have been asking from fifteen to forty cents per pound to get



MESSENGER ON THE TRAIL BEYOND THE SUMMIT, WITH NEWS OF THE ALIEN EXCLUSION ACT.



FIRST PASSENGER-TRAIN EN ROUTE TO THE SUMMIT.

merchandise over the pass, that no one is likely to complain at the company's getting back in this manner some of its outlay.

The northward traveler landing at Skagway is now met at the wharf by hotel vans, and the ubiquitous hotel runner makes the occasion hideous just as he does in other cities. The town has a population of about eight thousand, resident and transient, and boasts upward of twenty hotels. It has a telephone system, electric lights, water-works, a fire department, a company of National Guardsmen, schools and churches. But the most important of all is the railroad, and next comes a telegraph line soon to run far into the interior as a result of Canadian enterprise.

When the future fortune-seeker arrives at Fort Selkirk after a comfortable railway journey, as he will do after a few months, there will be many directions in which he may strike out, for the thousands of prospectors entering Alaska have brought news of rich gold-fields in other localities.

For a time all roads led to Dawson, but the word Klondike has since been in dan-

ger several times of being superseded as a synonym of the miners' paradise. Last August the Atlin district, eighty-three miles north of Skagway, was discovered and developed by Americans. Upward of fifteen thousand claims were staked during the fall, and then the miners were driven to tide-water by the snow and cold weather.

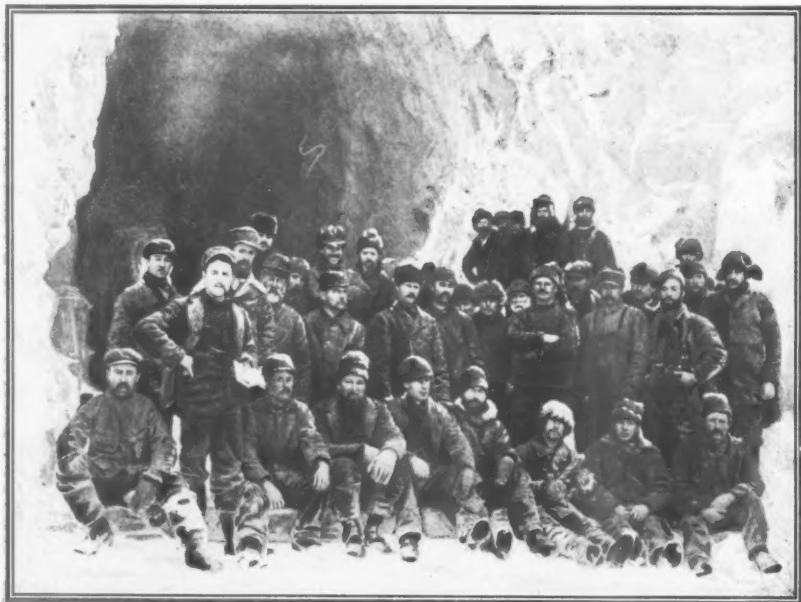


WAITING FOR A TRAIN TO PASS.

While these men were preparing to return to their holdings and work them, the British Columbia Parliament, in session at Victoria, passed an alien exclusion act, depriving Americans from holding or acquiring, by purchase or otherwise, any claims in the province. Very few of the Atlin miners succeeded in getting their claims recorded, and under the operation of the alien act all such claims reverted to the crown. Thus the work of the vast majority of the American miners in the district has been lost. There is a strong impression that the

acts and crossed over into American possessions. The Porcupine mining district on the Dalton trail drew many, and several rich strikes are reported, but this, unfortunately, is still too near the indefinite border for the men to feel sure of the protection of the American mining laws.

The boundary question is one that should be settled at the earliest possible moment. The British Columbia mounted police have not been free from suspicion of maintaining a somewhat elastic border line that has been more than once stretched



AT THE MOUTH OF THE TUNNEL.

passage of the act is a part of a scheme to consolidate the interests of the whole region under the management of a syndicate—a Cecil Rhodes mining trust transferred from South Africa to northern British Columbia. The exclusion act was passed early in January, and proved a great surprise, not only to the Americans, but to the mass of the residents of British Columbia.

When the news of the exclusion act reached the Atlin miners, many became disheartened or threatened fight, but others more wise abandoned their Canadian proj-

to include districts of great mineral wealth. Such a charge has, indeed, been definitely made by the miners driven from the Atlin to the Porcupine claims. The fact is that the dividing line is by no means accurately known, and must be settled by a joint commission of England and the United States. It is to be hoped that Governor Brady's present visit to Washington will result in some definite steps being soon taken in this matter, which becomes of great importance as the surprising wealth and resources of the land are fully realized.

LARRY McNOOGAN'S COW.

BY WALTER BARR.

HOWEVER complex the clockwork, when the train of wheels is all in position it requires but slight force to start the pendulum going.

In this particular case, Larry McNoogan's cow ran against the pendulum and started the swinging which before it ceased made the clockwork sound an alarm that was heard all over the state. The red and white beast must yield to one other cow in Illinois annals, but in the political field she was the most important factor of bovine character which that commonwealth ever knew, even in the state where the milking of cows is much talked of at the capital each alternate winter.

She gave up her life, it is true, but Larry did all he could to prevent that catastrophe. Indeed, that is how it all came about. The cow managed in some way to get within the inclosed right of way of the railroad, and when Larry tried to drive her out where the wires joined the hedge and could be separated, she became frolicsome. The "Jacksnipe" was coming, and being the fastest train on the road, it could not afford to slow down on the chance that the man would fail to keep the cow off the track. The engineer blew sundry short blasts with his whistle, as legal notice to all concerned, but when the cow, with Larry a rod behind her, started across the rails at the most inopportune moment, the pilot threw her high in the air, gave her a complete turn to starboard, and landed her upon Larry himself with the force of a missile from a sixteenth-century catapult.

The company, under the circumstances, did not think it wise to send its surgeon, and the doctor who set Larry's broken leg managed to leave him with both a stiff ankle and a false joint, half-way between the knee and the foot, which contributed more to his lameness than did the lack of a joint at the ankle.

The lawyer that Larry went to see as soon as he got out on crutches, was not certain about the legal right to recover, but felt sure that the railroad would compromise the case for something, and, of course, agreed with his client that the

company ought to pay for both the cow and the lameness, although, as he well knew, railroads never pay any claims they can fight.

Larry told his story better each time he came to town and called on his attorney, industriously practising in the interims different variations of expression in order to choose the one which would make his evidence weigh heaviest with the jury.

His lawyer, who was to get half the receipts, was equally hard at work planning his attack on the claim agent of the company, in order to insure success as far as possible. He first wrote a formal letter informing the road that he represented Lawrence P. McNoogan; and he thought it worth while to have the county clerk copy this for him on a type-writer. When this, and several other letters, some of which were in pen-text because the clerk was out of town and the deputy was not on good terms with the attorney, remained unanswered, he filed a suit for twenty thousand dollars, and waited for the attorney of the road to call upon him. But the answer was filed by mail the last day but one within the statutory provision, and the lawyer deemed it best to impress the importance of his case upon the company by going past two division points and superintendents to call upon the general manager. Right here is where the pendulum started upon its first full beat with accelerating force. The general manager had just authorized a draft of considerable size upon the company's treasury for the right of way across the last piece of land upon the new extension, and the reception of the lawyer was at first very cold and a little later very heated. Compromise was not the password to the company's strong-box that day, and before the lawyer reached the street the general manager's stenographer had taken down this, to go by wire:

"N. C. SHACKLETT, Warsaw: Please give enough personal attention to McNoogan case to beat it without any chance of failing. I want that case won with peculiar smoothness and directness, for special reasons.

J. P. NORTON."

When Ex-Senator Shacklett, general counsel for the Chicago, Galesburg and Mississippi railway—it is a great bother to have to conceal real names in these stories so carefully—had the papers brought to him, he smiled at the idea of taking time from the leased line receivership case to attend to so simple and absurd a suit; but he wrote the road's local attorney to get the case to trial as soon as possible and notify him at as early a date as might be when it would come up, as he intended to be there himself.

The hotel was not a good one, but it was the only one in the town, and it had for dinner the first day Shacklett was there some hot biscuits that made him rather like the place. He spent nearly all the afternoon telling the Congressman he had known in Washington about his life when he was a young man on the farm in southern Illinois, where nobody ever thought of any other kind of bread than hot biscuits and corn-bread. When he strolled out for a walk before supper, he was rather ceremoniously accosted by Larry McNoogan's attorney, who invited him into the dingy little room upstairs, where the sign and half a hundred sheep-bound books indicated that the lawyer had his lair. It was only five minutes afterward that Shacklett came out, stopping in the door to say, in a voice that could be heard down the stairs and across the sidewalk:

"I begin to understand why Mr. Norton asked me to come up here and give my personal attention to this suit. You are without doubt the smallest-souled cur and the biggest ass that the supreme court ever admitted to practice. You contemptible knothole in the bar, you microbe of putrefaction, if you think you can buy me with any little twenty centuries you haven't got sense enough to file a saw or a note for collection. You want to understand that if you live to be as old as the other devil is, you'll never get a cent out of this case. I'm going to keep you from getting a cent now, if I have to give all my time to you for the next ten years. You mark that right down on the fly-leaf of your Haines's treatise, for I suppose that's the only law-book you ever open." And Shacklett came down the short and narrow

stairway with his eyes flashing and his head up in that way that made those who knew him best turn a corner to avoid him.

When the trial started, the next day, there was no prospect of any features of special interest in the case. The local attorney for the company had pleaded contributory negligence on the part of the plaintiff in running toward the rapidly approaching train, after he had become a trespasser, without any rights, on the property of the company. Larry interrupted the lawyer once to inquire whether he expected a man to let his only cow stay in there without trying to get her out, and the court had some difficulty in suppressing his interjections during the preliminaries.

Shacklett had done nothing but see that the papers were without any loophole, and merely sat by the local attorney of the road, thinking of other things, while the case went along to the selection of a jury. Then he sat leaning his folded hands on a table and looking straight into the eyes of each one of the venire as the man took the chair for examination as to his qualifications. He allowed the other lawyer to ask all the questions, but twice he curtly took his right of peremptory challenge, and told his junior confrère that he could not explain just why he knew it, but the man was certainly crooked.

Larry told his story of the cow and her untimely fate better than he had ever told it before, and Shacklett grew interested in the man. Larry testified that his condition was very serious indeed, and the leg with a joint in the wrong place and no joint at the ankle prevented him from making a living any more, especially as he had no cow.

Then a short, heavy, well-knit man, with straight hair combed back pompadour-fashion from a low forehead, aquiline nose, and thin, nearly straight lips, took the stand and corroborated Larry's story of how it all happened, with some additional and very important details. He said that he was about forty rods away, up the slope of the field adjoining the track, and was watching Larry's efforts to get the cow through the narrow, improvised gateway where the wire fence joined the hedge, for some time before the train came. When the "Jacksnipe" came down the track, he

gave his attention to the train, as one naturally would, and noticed that after whistling the train increased its speed perceptibly just before it reached Larry and the cow.

"How much faster did it go?" asked Larry's attorney.

"Well, it just seemed to leap for'd like a dog at the end of a chain; I can't say that it really went much faster, but it seemed to give a suddint hunch for'd."

"Could you see what the engineer was doing?"

"Yes; he had been setting on his seat leaning out of the window on my side, but jest before the train gave the hunch he pulled himself inside the cab and did something to the reverse lever; I think he pushed it for'd, but I'm not sure about that—it looked that way from where I was—he did something anyhow, and then the train seemed to pick itself up and jump at that cow."

There was some more of the same kind of testimony from the witness, while Larry's attorney looked meaningly at the jury, and Shacklett at first sat with his eyes on the man giving the damaging evidence, and then sauntered over to the pitcher on the bench and took a drink of water. But by the time the evidence in chief was in, he was back in his chair, and he asked the young attorney by his side to let him cross-examine this witness.

"You were about forty rods away," he began in quiet tones, "up an incline, on the right-hand side of the track counting the way the train came, and you were watching Mr. McNoogan and the cow, until your attention was attracted to the train?"

"Yes, sir," the witness replied, straightening himself up and palpably preparing for a tussle.

After going over again the time of day and the whole story, in which the witness could hardly have wavered, even if he had not had it pat, because Shacklett fairly put his former words into his mouth; and after emphasizing in a way that made Larry's attorney smile the most damaging of the evidence, that the engineer had deliberately and unnecessarily increased the speed of the train and hit the cow as hard as possible out of pure wantonness, Shack-

lett walked around the table to within a few feet of the witness-chair.

He leaned forward just a little, brushed back a lock of hair from his forehead and looked into the eyes of the man on the stand with his own eyes glittering in a way that made the witness think of a snake. His tone was low, but penetrated every part of the little court-room, and seemed fairly to cause the window-sash to vibrate as he began, with each word separated just a little from its fellows in his sentences:

"Is it not a fact that this lawyer here, Mr. McNoogan's attorney, on last evening promised that if you would give this testimony he would give you thirty dollars?"

The local railroad attorney started in astonishment, for he could not conceive of the general counsel's having such information and not mentioning it to him. Larry's lawyer sprang to his feet and began a rather disjointed harangue to the court, the witness, the jury and Shacklett all at once. Every man on the jury leaned forward and fixed his eyes on the two men between whom the questions and answers were being passed. Shacklett's eye never wavered for the thousandth part of a second, but seemed to bear on the face of the witness like some mechanical instrument boring into his brain. The face of the witness flushed, became more rosy, paled slightly, and then resumed its natural expression. With that, Shacklett walked back to his seat and sat down; then he looked over at the witness expectantly. The latter said, in a most matter-of-fact way:

"Yes, sir; he did."

The physical and linguistic contortions of Larry's lawyer, and the fact that the state's attorney, who happened to be in the room, walked over to the stenographer and told him to make a transcript of that, have nothing to do with the present story. Such matters do not end trials except in stories purely fiction, and it was the next day before this hearing was finished and a verdict rendered for the railroad company. Of course, there was a motion for a new trial formally entered, and this kept the case alive, at any rate.

"Mr. Shacklett, how in the world did you find out about it?" the company's attorney could not help asking, when they were alone after the sensational session of court.

"Oh, I didn't," laughed Shacklett with his warm smile which had in it just a trace of the analytical geometry that one of his friends once remarked. "I saw he was lying; that ass must have paid him to do that, and the only question was how much. That disgrace to the bar wasn't paying more than was necessary, and I figured that about thirty was the price of that fellow on the stand. Since he tried to buy me, late yesterday afternoon, and was busy all morning to-day, the cuss must have done it last evening. I just ran a cold bluff on my system of play, and it won."

The pendulum started by Larry's cow, coming down on another sweep, knocked Larry off his mental balance and started Shacklett off on a tangent, both at once. Shacklett was in his little room upstairs in the hotel writing to his wife, when with a light knock, more apologetic than otherwise, Larry entered. Shacklett laid down his pen and motioned the visitor to a seat. Larry began, in a voice so free from the anger which Shacklett had learned to expect on such occasions, that the general counsel listened patiently to the telling of his tale of tribulation.

He had been able to make both ends meet, he said, as long as he could work and had the cow to give milk for the children. But since the cow was killed, and he could not work, he had been living on money borrowed from some kind friends on the strength of his lawsuit. Now there was nothing ahead but the poor-house for them all, and that meant separation a little later from the two boys and three girls. Shacklett was listening across the table as Larry went on:

"Now, Misther Shacklett, Oi want ye to know that Oi'd nawthin' at all to do wid that dirty loiyer buyin' that man to shwear to a lie. Oi'm an honest man, Misther Shacklett, an' if Oi didn't think the road ought to pay me for killin' me cow an' shmashin' me leg, Oi wouldn't ask it for a cint. But ye see how 'tis yerself now, an' whin Oi saw how ye could look into a man's very sowl loike ye did into that liar's on the witness-shtand, says Oi to meself, Oi says, Oi'll go to Misther Shacklett an' let 'im see that Oi musht have the money to kape the children wid, now that Oi can't

wurk an' haven't anny cow. Ye won yer suit all roight, but Oi came to ask ye, Misther Shacklett, if ye wouldn't pay me the money anyway. Av coorse Oi don't want twinty thousand dollars, but two thousand dollars'd bring me in a hundhred and sixty dollars a year at eight per cint., an' Oi could live on that wid the children."

Shacklett did not feel like smiling. He was looking at Larry all the time the latter was speaking, and wishing that he could make him a present of the money without prejudice to the road. But that it could not be done after the bungling of Larry's lawyer, he saw at once. He did not try to make Larry understand the intricacies of the matter, but in a very kind tone told him that it was impossible without allowing the lawyer to annoy the company for years to come.

"But ye musht," said Larry, in the same monotone. "Ye see Oi musht have the money or we can't live—at laste together, an' Oi won't live apart from the children." And Larry fumbled the buttons on his coat with his fingers, at first spasmodically and then bunglingly. "Ye musht, Misther Shacklett——" and at the last word the general counsel was looking into the barrel of a forty-four-caliber revolver.

Shacklett did not think of the sins he had committed during forty-odd years, nor did he think of calling for help. The latter would have been worse than useless, and the former happens only in fiction when a man faces death. Shacklett simply noted the great similarity in the conditions to that night twenty years before when he was a committee clerk at Springfield and the Chicago gambler had undertaken to win the jack-pot with a blue-steel card having seven spots in the cylinder; that, too, was in a little room in a hotel, across a table much like this, and Shacklett noticed that this was the same make of revolver as the other one he had looked into. All this went through his mind like a kinetoscope running away, but the case could not be met in the same way, because there was another kind of man behind the gun this time. Shacklett without a shade of hesitation assumed an air of succumbing to the inevitable, and reached for his pen as he remarked:

"If I must I must, I suppose; at any rate, I'll give you the company's check."

He reached the pen toward the ink-bottle with his right hand, and moved aside a paper with his left. The next moment, the ink-bottle had struck Larry full in the face and knocked him over backward to the floor. Before he had fairly landed, Shacklett was over the table and upon him, and although Larry had muscles seasoned by many summers and winters of hard labor, he found his arms in vises, with his elbows against his sides and his hands up at his shoulders—a trick that Shacklett had learned from a doctor accustomed to the giving of anesthetics. The revolver was out of the way on the floor, and Shacklett was saying:

"Whenever you give me your word of honor that you'll not kick up any more fuss here to-night, I'll let you up."

After Larry had gone, Shacklett finished his letter to his wife, and wrote:

"It has been a hard case for me, because the fellow is really in a pitiable condition as a result of the accident, and is crazed by his present situation. I wish I could do something for him, but the way his fool of an attorney talked to Norton and to me makes it necessary that I keep bearing down on his client. I have got to fight that whippersnapper to a standstill, but I am sorry that he is connected with this Irishman, who is as nearly all right as his lawyer is all wrong. If the Irishman had seen me before he hired his lawyer, and I had known what I do now, I would have recommended that the company give him at least a switch-stand; but I do not see how I can do anything for him now, for my opinion as a lawyer must be, that he has no case at all. But somehow, it worries me."

"Say, Shacklett, can't you run over to Springfield and look into that bill for the regulation of railroads with termini on river boundaries of the state, otherwise the Chicago, Galesburg and Mississippi railway? It is the most peculiar sandbagging measure I ever had held over my head, and I imagine it's worthy of your interest," General Manager Norton was saying during a chat over many affairs of the road in the private office.

"Sorry," replied the general counsel, "but when I stipulated in the beginning that I should attend only to strictly legal business, I did it especially to preclude my ever having to work for the road at any capital. I want to be free to introduce a sandbagging bill myself," he laughed, "and I'm not going to do anything which will tend in the least to show that I ought to be for the road in the legislature. If I'm elected justice of the peace some time, I shall feel bound by my contract to decide all cases in your favor; but if I go to the legislature, I'm free to vote against you every time if I want to."

Norton laughed too, and Shacklett continued:

"But I see no objection to recommending good men to you for that work, if they're my friends. Now there's young McKee, of my town, who is a statesman out of a job, since he lost a committee clerkship, and he can manage your lobby for you this winter as well as anybody, and better than some you've had there lately. I wish you'd give him the place, and I'll guarantee his quality."

Norton looked at his desk to hide the smile in his eyes at the metaphysics involved in Shacklett's chosen position when it was all worked out, and responded that McKee would be sent for that afternoon.

McKee found that the bill to regulate his particular road was peculiar in that it displayed an astonishing amount of detailed knowledge of the conduct of railroads, and their desires which are kept the most deeply hidden. The strangest thing was that a member from far down in "Egypt," who had been raising horses and wheat for thirty years, should happen to light upon so many particularly distasteful features and get them into one bill. Of course, a lawyer had written it, but the member made no secret of the fact that he had caused his son-in-law, a lawyer in a country town, to fix up the language and insert "said" and "provided" in the proper places.

The lobbyist in charge of the interests of the railroad spent a week studying the member who introduced the bill, and then decided to seek elsewhere for an opening in the lines of the enemy. The member certainly was in earnest, and, curiously enough, was honest in his views.

"There's bills enough bein' introduced here," he said, "an' I wouldn't add to the straw comin' out of the threshin'-machine if I didn't believe that a bill like mine oughter be passed. You fellers can't understand the farmer any more than the farmer can understand you, so I don't see much use of our argering. But I expect to find enough members here who can understand it to get it passed—that is, if you don't buy up too many o' 'em. I hain't goin' to preach about your currup't methods, for all's fair in war, an' that's the way you fight. But if I can beat you with my own little game, I'm goin' to do it."

Then McKee went to two or three members who had shown themselves earnest supporters of the farmer member's bill. He got little satisfaction from them. One of them talked about the oppression by capital, and the danger to the country from corporation greed and the other things, so glibly that McKee knew that he did not believe what he was saying and was using it for a mask. But he found it impossible to pull off the mask. Only one of them was candid with him, and this one said:

"Young man, I know pretty well what your road's worth, and within a few thousand what it has to spend; but I want to tell you that you're raised out of this game and are playing in company too rich for your blood. If this bill hit other roads so they could pool, they would probably break the push behind the bill; but your one road can't do it by itself, and I know it, and you'll find it out by failing to weaken our side."

"But who can have enough affirmative interest in this thing to raise us out of the game, and enough money to do it that he wants to spend in that way—how can he make anything by it?" McKee asked boldly, hoping that the candor of the other man would extend to some valuable information.

"I don't know how he's going to make anything by the bill passing," was the reply, "and to tell the truth I don't know exactly who he is, but I know he's spending hardly any money. I didn't say he was, did I? There's other valuable considerations around here besides legal tender, ain't there?"

"I see," said McKee, with puckered

lips; "it's influence. Who has the appointments? The Governor and the Senator; but what are they up to? We might satisfy them in some other way, if they'll only state what they want."

"No; it's not the Governor nor the Senator, I'm pretty sure from what I know. It seems to me, young man, that you'd better post up on the situation before you expect to bust the machine you're up against. I wouldn't tell you if I knew who's behind the measure, but I will tell you that I get out of it certain things that will be worth more to me than any money that's paid around here very often."

McKee felt that his future was at stake, for if he executed this job for the railroad, Norton would keep him for years in charge of his lobby at Springfield at a good salary and with plenty of chances to pick up something besides. But if he failed, somebody else would succeed him before the session was a week older. He knew that results are the measure of efficiency in the lobby, and that there was no argument in anything else. He saw the bill referred to committee and heard the chairman tell its sponsor that it would be reported back the following week; he saw member after member suddenly take an interest in the bill, and the only light he got was by noticing that those whose terms expired with the session and who would be up again soon for reelection composed the principal part of those sending the bill along toward passage and signature. He soon found out that the Governor would sign the bill if it passed, and would not meddle in the matter or consider it before the bill had got through the legislature. In despair, he ran down to Warsaw one morning and saw Shacklett.

"I understand you guaranteed my value to the company," he said, "and I came to tell you that you'll have to meet the paper when it's due, from the present outlook. I never saw such a close combination behind any bill as there is behind this one, and it's as powerful as it's invisible. It's like a big trolley-car pushing along with the dynamo hid in a swamp and the swamp not on the map. If you won't get into that side of the road's affairs, can't you help me personally? I hope you catch the distinction." And McKee tried hard to laugh.

"I think you can work it out, if you go at it right," Shacklett said, with little display of interest. "It's always the best rule to bunch your shots, in legislatures as well as in fighting in the navy. Now if it were I, although I'm not posted enough to know much about this case, I'd let the main line of privates and non-coms alone and fire all my ammunition at one shot at the commander-in-chief. That might work—but I can't tell, of course, as well as you can when you've been there so long."

"That 'so long' was unkind," wailed McKee; "and how can I do that when I can't find out who the commander-in-chief is? I'd give half what Norton allowed me to find that out."

Shacklett laid down the law-book which he had been furtively reading while they were talking, and looked up at McKee for almost the first time.

"I'll tell you frankly," he said, "that I don't want to have anything to do with this part of the company's business, and I don't want to talk to you about it; but evidently the chairman of the committee that has the bill knows his business and knows whom he's working for; now why don't you go to him and talk business from the jump? Find out what will bring him off the perch and then shoot it at him. That's what I'd do. But I don't even advise you to do it, nor suggest it to you for action. Let me do something else for you, and don't mix me up in this thing, please."

McKee went out vexed, but the more he thought of the plan Shacklett had laid down, the better he liked it, and at any rate there was nothing else to do as far as he could see. So, as soon as he got back, he asked the committee chairman up to his room at the hotel, having casually met him in the corridor.

"I've been thinking that you folks weren't taking much interest in that bill," the chairman replied to McKee's opening, "and there's not the least doubt that it will make farmer votes for me and the rest of them by the wagon-bed full. What benefit do you think the state will derive from its defeat that is greater than a wagon-bed full of ballots?"

"A hundred thousand dollars more," said McKee, quietly and firmly.

"Then hunt up somebody to pay the money to, and your hand full of artistic engravings is better than theirs full of cheap job-printing. That lets me out, of course. I don't mind telling you, so that you'll understand it, that a hundred million dollars is no temptation to me, and I think you ought to know it yourself if you're capable of earning your salary in the third house."

"Senator," McKee said, groping in darkness again and at the extreme end of his string, "would you mind telling the unknown, invisible, impalpable, unfindable, indefinite spook that drew that bill and is pushing it along here like a heavy express-train on a down grade, that if it will tell me the mystic words which will send it back where it belongs, and stop its infernal work in this legislature, I'll say them, and I don't care what they are. I'm exceeding the limit given me, but I don't care. I'll give our road away and hunt another one to work for, but I'll kill this sandbagging bill if I have to sell the devil my well-earned right to the chairmanship of his committee on thermostats and apparatus."

The chairman leaned back and laughed heartily, while McKee continued to scowl. "Oh, yes; I'll be medium for you," he said. "Come to my room to-morrow evening at eight o'clock, after I've had my great materializing séance."

When McKee kept the appointment, he sat down without a word, and while he looked expectantly at the chairman, he said nothing, for he was thoroughly discouraged and disgusted with the problem that had not only no solution by any known rules, but not even a point of attack. The chairman's eyes twinkled at the remembrance of his last speech at the hotel, as he opened the conversation briskly.

"There's one way to beat that bill," he said, "and only one: I will never report it out of committee, and you can go into the committee-room and steal it if you want to, provided——"

McKee leaned forward almost over the table and looked straight into the chairman's eyes, which only continued to laugh back at him. A twinkle is a mask for the eyes that nothing can penetrate or pass behind, and McKee was furious, although

he did not dare to show it. He kept silent and perfectly motionless for the several seconds that the chairman paused. Then the latter went on—

"Provided that you pay the sum of five thousand dollars in cash, with a contract for suitable employment for life, to Lawrence P. McNoogan."

"We'll do it," snapped out McKee, like the breaking of a taut violin-string. "But who the devil is Lawrence P. McNoogan?"

"He is the plaintiff in a suit against your road for damages resulting from the killing of his cow and the breaking of his leg, which suit is now appealed from the refusal of the trial court to give him a new hearing. His lawyer is out of the case, having given it up in disgust and because he is busy defending himself from various criminal charges. Since he has no attorney now, it will be necessary for your road to appear and of its own motion allow the granting of a new trial and then consent to the entering of judgment for five thousand dollars. He won't need to employ another lawyer then."

Even if McKee had failed to find the mechanism concealed in the box, it was pretty evident that the pendulum started by Larry's cow was still swinging. What it accomplished after that belongs to the chronicles of an ordinary life with another cow and the children, and not to the more complex circumstances of politics.

It was the evening before the next Fourth of July, and McKee was trying to comply with Shacklett's request to find his cele-

bration speech in the middle drawer of his desk, while Shacklett himself packed his valise in time to catch the train. When the general counsel of the railroad came in hurriedly to pick up the manuscript and drive rapidly to the station, he found McKee standing beneath the electric lamp with several sheets of cap paper in his hand.

McKee looked up at Shacklett with distended eyes and open mouth, looked back at the paper, and then at Shacklett again. The paper was covered with writing much interlined and crossed out, with notations scattered through it, and additions to sentences running up and down the sides. Shacklett hardly noticed McKee, and said quickly:

"Got my speech? Let's have it. Much obliged, but I'd have missed that train if I'd tried to find it myself."

McKee at last found his voice, though it sounded little like his own as he blurted out:

"And you wrote that damned bill yourself. It's right here in your own handwriting—the first draft. What the——"

"See here, McKee," and Shacklett's voice was as quiet as a frozen pond and as hard and cold as ice, "McNoogan got what I wanted him to have, and you got a position at three thousand and per. No man ever threw me down and kept out of the poorhouse. Understand me?"

McKee threw the draft of the bill into the grate and held out the manuscript of the oration for next day with a steady look into Shacklett's eyes. Shacklett caught the train.

SUPPOSING.

BY DORA RITTER JACKSON.

SUPPOSING every star in heaven,

Resembling gold and fond desire,

Should drop in dazzling luxury

At my feet to-night, like coals of fire,

With hope renewed and promise blest

That these should all be mine, and more,

If I'd renounce that I love best;

Quick would I spurn their offers true—

Because—because—it would mean
you.

Supposing every fire in the land,

With tongues of flame and seething heat,

In witch-like blaze should clasp me round

And whirl me down at Satan's feet,

Then luring with hypnotic glow

Should promise they would set me free

If I would cease to love you so—

They'd have to burn me through and
through,

Because—because—my life is you.

HOW THE FRENCH ARMY CROSSED THE CHANNEL.

(Conclusion.)

BY QUATRE ÉTOILES.

THE French plan of campaign had been very thoroughly worked out. It contemplated securing possession of London within thirty-six hours after landing, and the probable concentration of a great army at some point north of that city, so as to make at least one great battle necessary. Should the French be successful, the possibility of rallying any force in sufficient numbers to make a second stand, would be unlikely. Then, by placing armies of from fifty to one hundred thousand men at strategic points, future uprisings could be prevented.

No sooner had the news been conveyed to Windsor, than the Queen had started off hastily for Scotland and Parliament had followed. Lord Wolseley at first issued orders to concentrate troops at Chatham with a view to the defense of London. Nearly thirty thousand men had been hastily brought together only to be attacked by a force three times as great, and completely routed with great loss, not only in killed and wounded, but in prisoners. While this action was going on, Lord Wolseley began to comprehend the extraordinary situation with which he was confronted. As report after report came in telling of the landing of the French troops, he saw that in the brief time at his disposal it would be impossible to concentrate his divisions at any point near London.

A less able soldier would have failed to recognize this. The English had so long considered themselves removed from the slightest danger of foreign invasion, that such a thing as the capture of London would have taken many hours to become a danger in the mind of even the most speculative Englishman. The necessity of defending the capital, with its millions of treasure, at any cost, would have decided the average officer, and the best troops of England would have been frittered away in the endeavor to prevent the overwhelming advance of the French army on the metropolis.

To throw out small parties to make a show, as if the English army were present

in numbers; to delay the French until Englishmen could be pulled together; then to hastily retreat and make a stand a little farther back, was the policy adopted. Meanwhile every railway car was pressed into service to hurry forward arms, ammunition, troops of the line and volunteers to Sheffield, in the neighborhood of which ground had been selected as offering a strong situation. Laborers were hurried in by tens of thousands from the mines and workshops, and set to throwing up intrenchments. Every gun of over six inches caliber that could be hastily dismounted within a radius of two hundred and fifty miles, was ordered to be shipped forthwith to Sheffield.

The confusion consequent upon the giving in rapid succession of the endless orders required by this emergency—many of these orders obscure, many of them even contradictory—would be difficult to describe. For once the lethargic Englishman, full of inherited pride and wedded to the idol of custom and precedent, was startled out of every idea of propriety. As the news of the successful landing and endless battalions of Frenchmen—some reports made the number of the invaders as high as a million—came along, there was a rousing up probably unequaled even in the days when William the Conqueror brought his ships to the Sussex beaches. But there was no organization to meet such an emergency. Men tumbled over each other in their efforts. There were not enough experienced men to direct the efforts put forth by those who combated the difficulties of the situation and were endeavoring to bring order out of chaos. No one had ever contemplated such a situation. It would have been too great a sacrifice of dignity to bring a committee together at any time between 1815 and 1904 to consider what might be done in the event of such a contingency. With all the brave officers in the English service, not one had possessed sufficient moral courage to submit to the Horse Guards a plan for action in the event of the invasion of England by France; that would have been

looked upon as a joke—and the officer would have fared like many practical jokers.

General Lord Wolseley, however, and a great staff were moving heaven and earth to get things together. Not for a moment within the first thirty-six hours did the commander-in-chief close his eyes. He was roundly berated for deserting London. From every quarter came outcry from that class of little minds which, incapable of comprehending plans on an extensive scale, is ready to sacrifice those looking after its best interests. As the drowning man seeks to bind his rescuer in his embrace and thwart his efforts, so the correspondingly egoistic mind stands ready to pull down those who would save him.

Strategically it was of the utmost importance that London with its wealth, the like of which the world had never before known, should not fall into the hands of the enemy. But Wolseley knew that if he should risk battle with such troops as might be gathered between Dover and London, the result would not be doubtful. One hundred and forty miles away is Sheffield. Small positions, held by forces which the enemy would be incapable of estimating, would retard the advance of the French for a sufficient time to bring together all the available resources of England. If the reports coming in told the truth, there would be but little chance of being able to organize at Sheffield an army strong enough to withstand the enemy. Nevertheless, that was the action which seemed most promising, and every energy was bent to mass the volunteers, both organized and unorganized, behind earthworks that would enable them to offer stout resistance to the French artillery.

The entry of the French troops into London met with no opposition. Stocks, bonds and plate had been sent off by the carload to Scotland, and the houses of the wealthy were deserted. But the time had been too short for any great exodus upon the part of the people generally. The military had required every locomotive and every car, and with the exception of the able-bodied men, who had gone off to take their places in the trenches at Sheffield, the population remained much the same. There was even a disaffected element, com-

posed of the most hopeless classes, whose condition had been so bad that nothing could frighten them in the way of change. They found reason to hope that out of the turmoil might come some alleviation of their situation or personal gain of some mysterious kind which they could not distinctly outline to themselves.

The first landing at Sandgate had been on the evening of the 10th of September. It was the night of the 17th before the advance of the French army came in sight of the long lines of earthworks occupied by the British before Sheffield. The entire day of the 18th was spent in skirmishing and in bringing up the various army corps to the places which they would occupy along the proposed line of battle. Nearly half a million Englishmen were at this time under arms. The French had succeeded in bringing up about three hundred and fifty thousand infantry, artillery and a few cavalry; but they were all trained troops, thoroughly armed and equipped, familiar with the handling of ammunition, and with all the work which the morrow would lay out for them.

Nearly one hundred and fifty thousand additional French troops had either been debarked on English soil or were then crossing the channel: but the railways had been somewhat crippled by destruction in face of the advancing enemy, and were so occupied with the ordnance and commissary stores as to render very slight the chances of these regiments coming to the front in time to be available.

It would be useless to go into a description of the battle of Sheffield. Every officer who took part, every correspondent who was on the field, has to-day his own version of it. There are a thousand conflicting stories as to how it happened and who did it. It is like all battle histories: as the mass of testimony grows, the real facts will constantly become more clouded and more obscure.

It is only necessary to mention the results. Nearly ninety thousand Englishmen dead or wounded, and quite as many Frenchmen either in the hospital or dead on the field of battle. The earthworks had formed an immense vantage-point for the English; but the volunteer was at a disadvantage with the trained soldier. Lord

Wolseley, mortally wounded, was unable to superintend the retreat, which presently became a rout. Kitchener, who succeeded Wolseley, undertook to move the main body of his army toward Scotland; but the French followed in such close pursuit that at dawn on the following day a second battle was fought, with even greater disaster to the English than at the first. Brigades, and even divisions, escaped from the field, but in such shattered condition that it was deemed unwise to prolong hostilities.

Accompanying the army of invasion was a picked corps of newspaper writers, composers and pressmen, who had been previously selected for this service because of their ability to write the English language. They had been summoned to the review at Boulogne for the 10th of September without being notified as to what service was expected of them.

No sooner were the French regiments in possession of the streets of London, than the services of this journalistic corps were called into requisition. Divided into a dozen different staffs, they were immediately distributed among the newspaper offices of the English capital, and many foreigners who had been connected with the London press were added to this number by an offer of high salaries. Instructions were given to resume the daily publication of the leading newspapers immediately.

The first editions contained fewer pages than the journals whose names were used had been wont to issue; but the type and general make-up were the same, and it was not altogether easy for the reader to discover that an entirely new staff was in possession. The first page of the first issue was given up to the proclamation of President Loubet. This proclamation had been carefully prepared in Paris long before the review of the 10th of September. It read as follows:—

"Englishmen—Citizens of the new Franco-Anglican Republic: The French army comes not as an enemy, but as a friend; it comes as a deliverer, as a benefactor to the great mass of Englishmen, to give the whole body of your people freedom and equal privilege, to give you a republic. We salute you as brothers. You have

been burdened by a costly and ridiculous court nobility, who have consumed your tens of millions without making any return in the direction of necessary government. You have been ground under the exactions of an aristocracy of blood in copartnership with an aristocracy of money; under the exactions of an oligarchy built upon fortunes accumulated by unjust discriminations. Your laws have been devised to protect the strong at the expense of the weak, and to give to those who already have; to place the results of modern methods of production within the hands of the few at the expense of the many. You have been oppressed by custom. The principle of the new republic will be to maintain equality; to institute an intermediate caste which will be democratic because it will always be open to all. Your nobility has existed entirely by privilege; it has had no merit but that of being exclusive. Every man in the new republic who shall distinguish himself, will have a right to belong to the new order of nobility, in which every member shall have deserved a position by his actions, and in which every man may obtain position at the same price. In the new order, no class shall be superior, no class exclusive. Private property will be respected; but public burdens will be distributed equally. The French troops ask you to receive them as brothers—to unite with them under a republican form of government which shall make France and England, combined, an invincible force in the progress of civilization."

Ten millions of copies of the journals containing this proclamation were struck off. A thousand secret agents, dissatisfied Englishmen or men of other nationalities who had been living in London in poverty, were set at work among the common people, even while the wounded were being removed from the field of battle. Every specious argument that could be devised was used to create a sentiment among the middle and poorer classes.

A second proclamation was issued, calling for the election of representatives to sit in a new Parliament. Care was taken to pick out men who would have something to gain by the change. The most expert methods known to modern elec-

tioneeering were resorted to. While pretending to make the election absolutely fair, its devisers in reality controlled it with an iron hand. But all seemed auspicious. The press continued to pour out statements ingeniously colored to advance the French views with that class of special pleading so well understood by those who work for a living at the command of masters.

To read these new editions of the "Times," the "Telegraph," the "Pall Mall Gazette," the "Chronicle," one might almost have doubted if an invading army were occupying the city. From the press one would have judged that there had been a civil revolution, and the government been overthrown from within—that the French were merely acting as a police which would be withdrawn presently, but was now necessary to preserve order.

Accompanying this were most violent attacks upon the Queen, the Prince of Wales and other members of the reigning family. The lives of Conservative statesmen and leading noblemen were held up to contempt. Heaven knows that there was no dearth of material for this purpose.

The methods by which many of the great fortunes of Great Britain had been acquired, constituted subjects for keen analysis. Liberal or radical statesmen were praised, and it was made to seem as if they were somehow a part of the new government.

The news was given from the field of battle with the utmost minuteness. English readers were compelled to take these journals because they had none of their own. They read them to get the news; but many people in reading them were involuntarily influenced in mind. A considerable class began to think that perhaps, after all, a French invasion had been a godsend.

Poor men of some mental capacity were picked out and employed at more than double the wages they had ever received before. A number of crafty fellows who understood their countrymen received large bribes to take part in the government. These addressed their new fellow-citizens over their own signatures, pointing out the advantages which had arisen under the new republic. The exchanges were opened, and in the wild excitement that followed,

were manipulated so that those on the inside might make fortunes.

An immense war tax was devised, so as to fall on the landed estates of England. Its bearing on the middle and lower classes would be slight. It was almost equivalent to confiscation in the case of many estates which were so situated as to be forced to go to sale in order to meet its requirements. It was purposely designed so as to throw these great properties on the market in small parcels; and the consequence was that within a brief period, the number of property-holders in Great Britain was more than quadrupled.

The party in power had the press entirely in its hands; no protest could be uttered. It was impossible for those against whom this legislation was directed to complain. A century earlier, objectionable men would have been arrested and put behind bars or even shot. No such clumsy methods were resorted to now. Private pressure was brought to bear to ruin them, and they were held up to ridicule and contempt in the press in every conceivable way. That class in British life which tends to fawn upon and toady to wealth and rank, now became the most brutal in its treatment of those things to which it had formerly bowed down. Looking back over it all now, it seems impossible to believe that such a change of opinion, such radical readjustment of interest, could be possible in so short a time. But there it was. So terrific and far-reaching are the influences of power brutally exercised. Just as in India and in Africa power backed by a sufficient number of Gatling guns had been able to overturn and destroy, and finally to write down black as white because the destroyer had the writing of the chronicles in his hands, so now in England.

Power is power everywhere, at all times the same. The feeble give way before it, the conservative pander to it, and the scheming and cunning connive with and are subservient to it; the press is its humble slave, and history is written at its command.

Thirty-five millions of pounds were immediately appropriated for a new navy.

As has been already stated, General Kitchener was not able to hold his forces together after the second battle. By mas-

terly French tactics they had been segregated and finally compelled to surrender to immensely superior numbers.

The Queen, the Prince of Wales and other members of the royal family had been made prisoners, and sent off to Nice, where they were provided with villas, though kept under close surveillance. Here the Queen died shortly after her arrival, and the Prince, determined to make the best of the situation, gave himself up to the enjoyments of the brilliant court, including many rich Americans, which gathered about him.

Scotland and Wales presented an angry front; but at every strategic point the powerful French army stood ready to smite with brutal hand all who might be disposed to rise in opposition.

It had not been possible to land a force in Ireland early enough to prevent an uprising. Nearly eighty thousand men were in arms around Dublin before it had been possible for the French to spare any considerable force. Commissioners were sent to treat with the Irish leaders. The futility of resistance was pointed out, and at the same time it was shown that Ireland would constitute a distinct state in the new republic and have practically its own government, as in the case of New York and Pennsylvania in the union of the United States. Finally, just as the French cruisers and transports arrived off Queens-town, the proposition of the commissioners was assented to. The French troops did not land, but contented themselves with dispatching a new set of officials who would have charge of the government reorganization.

The events which have since occurred are familiar to all. The English people have the highest capacity for self-government. It required only the breaking up of the old conditions to put the nation truly on its feet. The English brought into the politics of the new organization just that admixture of steadfastness and common sense which was required to make a republican form of government a success.

The money expended in building the new navy, and other public works which were speedily set on foot, created a nucleus for prosperity. Soon trade was resumed and the business outlook grew bright.

While England and France were being thus revolutionized, Italy had gone from bad to worse, until the King's supporters were in despair and the clerical party had finally made up its mind to accept a republic as a choice of evils. Groaning under debt, harassed beyond measure by the disorders within the state, the people organized a society to bring about the attachment of Italy to the Franco-Anglican republic.

The signs of the times were all in favor of increasing territory. Russia, Austria, Germany, each had in mind the gobbling up of neighbors—neighbors who by this time were becoming reconciled to the inevitable.

Spain had dethroned its King, and, while struggling in the vortex of an ill-designed republic, turned its eyes anxiously to the larger and better-constituted republic successfully administering the affairs of the adjoining territory. At the same hour, both Italy and Spain were admitted to the full privileges of the Franco-Anglican union.

By this time Englishmen had come to make themselves felt everywhere in the administration of the new republic. The serious discussion of disarmament, which had been begun by the congress called by the Czar at the Hague, had brought forth many theories, and educated the public mind up to the point of expecting an early settlement of the question.

As a result of these arguments, there had arisen a theory of natural boundary lines and of territorial differentials. It had been agreed that an annual conference of nations should meet, with delegates from the civilized nations casting a vote in proportion to population—the uncivilized peoples to have representation and right of discussion without voting power. To this congress were to be submitted all differences between nations, schedules of trade, measures of international finance, et cetera.

Meanwhile journalism had been revolutionized by being separated into two distinct divisions—political journalism and news journalism. The company or individual engaging in news journalism was obliged to disconnect it absolutely from partisan bias. There were enacted laws which provided the heaviest fines for those seeking to distort the news so as to

serve a political or private purpose. Before entering on news journalism, the editors and proprietors were required to take an oath to use the utmost diligence in presenting the entire truth, without coloring or distortion or suppression.

Political journals, on the contrary, were to be supported entirely without advertising. They were made up of editorial comment on the interests of the day; they were supported entirely either by contributions made by those interested in the

causes which they advocated, or by being sold at a price sufficient to cover the outlay of preparation. As a result, they became the product of a few minds of the highest class, who received the broadest recognition, and whose position became one of the highest dignity.

Just here the writer was awakened by a knock at his bedroom door. "Here are the morning papers, sir."

"Why, what is this?" The New York "Herald," dated March 25, 1899.

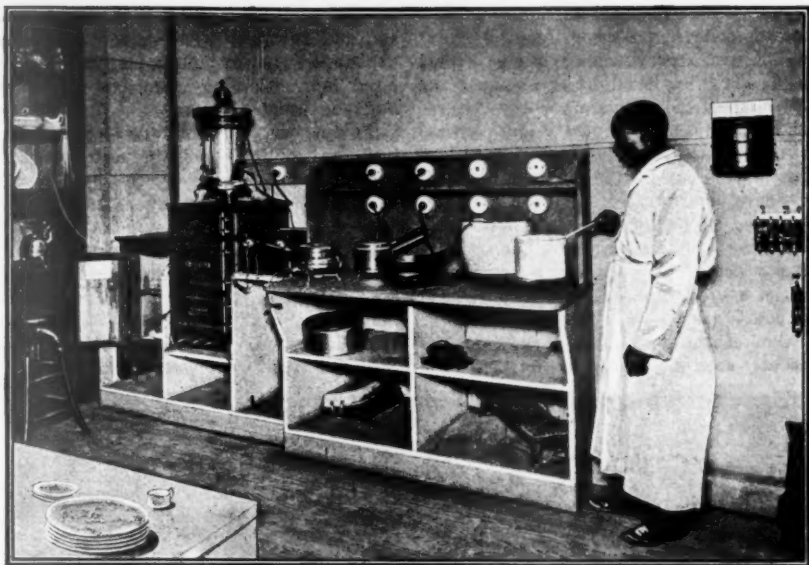
FIRE-APPLIANCES.

THAT portion of the public which has occasion to live in hotels or to occupy offices in great buildings, was made nervous for a day over the frightful results of a fire started in a hotel at midday. Yet the day after such a catastrophe the subject is dismissed from the public mind and apparently passes out of sight. The newspapers indulge in some desultory discussion about fire-appliances; but no agreement is reached, and the matter, ceasing to be news, is no longer discussed. Yet there are two appliances known to fire-departments either of which would have prevented the loss of life at the New York hotel. Both are of the simplest character.

The fire-extinguisher is made with a glass bottle which holds the acid, its top covered by a thin coating of mica, and the center of the bottle drawn slightly together so as to hold a little rubber-covered ball. Outside of this glass is the charge of soda held in a solution of four gallons of water. At the top is a small rubber hose, the end covered with a rubber cap which is so thin as to be broken by the slightest pressure. The copper cylinder in which it is held has a handle at the top, by which it can be hung on the wall. At the bottom is a second handle. No effort is required to discharge the cylinder beyond grasping the lower handle and turning the apparatus upside down. The rubber-covered lead ball drops upon the isinglass, the acid is released, and coming into contact with the water and soda, generates the gas. The rubber covering on the end of the hose is blown off by the gas, and immediately there is thrown out a stream of gas and water which will reach to a distance of fifty

feet. In personal experiment made for THE COSMOPOLITAN building, a fire was extinguished which was made by a number of pine boxes and barrels more than six feet high, soaked with oil, and allowed to burn until some of the pieces were almost charred through. A single cylinder was discharged, and exactly fifty-nine seconds from the time it was reversed, the flames were entirely extinguished.

The other apparatus referred to is for saving life when a building is in flames. It consists of a strip of canvas, long enough to reach from the story in which it is placed to a point across the street from the building. The canvas is braced on each side by a rope sewn into it so as to permit the canvas itself to bag in the center. It can be rolled up neatly underneath the window-sill, to which it should be securely fastened. In the event of fire, the occupant of the room has nothing to do but pitch the roll of canvas out of the window. In the street it will be seized by the spectators, who stretch it as taut as possible by the ropes which dangle at the ends, or one side may be fastened to a post and the other held. Then in rapid succession children, women and men may jump into this chute and slide with ease and perfect safety to the bottom. It is impossible to fall out, and fifty persons could come down such a chute in the space of five minutes without previous training or experience of any kind. The entire Windsor Hotel could have been provided with such appliances at a cost not to exceed five thousand dollars; yet for the lack of such a simple contrivance, forty-six lives were lost. It is not new; it has been known for years.



AN ELECTRIC COOKING-STOVE—NO COAL OR GAS USED.

SCIENCE IN THE MODEL KITCHEN.

By ANNA LEACH.

A CENTURY ago Brillat-Savarin not only made literature about the art of cooking, but gave serious advice concerning its value to the state. It has taken Americans some time to master each of the many lessons they have had to learn, but when a subject is reached they exhaust it.

Savarin said: "It has been proved by a series of rigorously exact observations that by a succulent, delicate and choice regimen, the external appearances of age are kept away for a long time. It gives more brilliancy to the eye, more freshness to the skin, more support to the muscles; and as it is certain in physiology that wrinkles, those formidable enemies to beauty, are caused by depression of muscle; other things being equal, those who understand eating are comparatively four years younger than those ignorant of that science."

For a good many years we persuaded ourselves that that was frivolous nonsense. We were a lean and hungry race. Other countries said that our women faded in the

early thirties, and spoke pityingly of our national dyspepsia, but we had answers for everything. We said that American men were too busy to eat and American women too delicate, or we topped off by Wordsworthian remarks concerning plain living and high thinking. That anybody did any high thinking on some of our foods, showed our greatness as a people. With the most abundant and the richest raw food-materials in the world, we were one of the poorest fed. It is a fact that within ten years nine out of ten American families, the country over, fried their beefsteaks, and when they entertained their friends gave a "high tea" in which the table was loaded with cold meats, preserves, pickles and china. Everybody remembers parties in the dead of winter where the company was sent home, past midnight, fortified with ice-cream and cake.

Mr. W. D. Howells says that a popular refreshment at one time in New England was apples and water, and he has attended festivities where the apples were omitted.

But we have changed all that. A well-known college professor recently spent ten days closely watching a man sealed inside a box that he might learn some of the secrets of nature's laboratory where she turns food into capacity for mental and physical work. In the rebound from the old idea that it was good for the mind and the soul to starve, and that eating was a gross indulgence, we have almost come to the point where we consider the young human brain like a bee embryo, ready to become a drone, a worker or a queen according to its nourishment.

One of the first hints came from the teachers among the poor. They discovered

food seemed to digest into an ability to add and subtract. The subject found its expounders and exploiters, and was elaborated into something more than a theory built on isolated facts.

As time went on, cooking was introduced into the public schools in many places, notably Boston, and every small town had its cooking classes, and lessons in domestic science.

As an adjunct to this came new theories of sanitation. The old-fashioned wood fire, perfect for roasting or broiling, and the charcoal fire which every French cook once demanded, had disappeared. Soft coal and hard coal, both full of dust and



CORNER IN BUTLER'S PANTRY, RESIDENCE DR. LUCIEN WARNER, IRVINGTON-ON-HUDSON.

that the well-fed children were quicker to learn and apply than the ill-nourished.

At the first glance, that would appear to be only a matter of natural inheritance. The child of thrifty parents, intelligent enough to earn good food and supply it to their children, might be expected to show greater cleverness than the child of the shiftless. But the patient teachers spent time in investigations. They visited the children in their homes, won the friendship of the mothers and persuaded them that cereals and milk were as cheap as heavy bread and bitter coffee for a child's breakfast. The effect of the change of diet was ridiculously instantaneous. Wholesome

odors, made the only available fuel, and, with no means of carrying these away, it was a wonderful city housekeeper whose kitchen was an agreeable place. Architects would probably have gone on building miserable kitchens forever had the domestic-science classes not taught women themselves. As it is, not one book has been written upon kitchens. It is possible to collect a library upon every other part of the house from ornamental roofs to door-knobs, but the heart of the house is too humble for mention, although the kitchen has become as complete in its appointments as any other chemical laboratory. It is quite as clean and dustless, for women

know all about the growths from heat, moisture and darkness.

The kitchen should be exposed, if possible, to sunlight, be so placed as to avoid shadows, and should open directly to the outside air. The room itself should have a vitrified-tile floor, laid in hydraulic cement.

In making his plans, the architect has the floor slightly fall from the walls to the center, not enough to be perceptible to a person walking on it, but sufficient to insure against water flowing toward the walls, or appliances put against the walls. The floor should never be drained with waste-pipe, and the side-walls should be finished with a vitrified-tile base.

The walls of the modern kitchen can be made as beautiful as the purse allows, and in some of the splendid new houses they vary the cream or white of the tile with the blue of delft, or the brilliant mosaic effects. The tile is always the handsomest finish, but architects are inclined to consider the very much cheaper Keene cement equally sanitary. It costs so much less that there is never any hesitation

in putting it behind anything, and, thoroughly enameled (not painted), it is waterproof and impervious to any vermin. If at any time it becomes cracked through the settling of the house, it is easily mended. The beautiful tile has its disadvantages. The glaze will sometimes crack, or "craze,"

leaving, after the enamel has fallen, a spongy "biscuit," which is as absorbent as a sponge. There have been new cements invented which have fastened the tiles more firmly to the walls than was once possible, and a brass- or nickel-plated screw holds many of them. A wall made entirely of vitrified brick is one of the handsomest and most sanitary. Some of the floors are made of trazzazo instead of brick or tile. This is a sort of cement filled with particles of mar-

ble, and it cannot be insured against cracking.

The ceilings of many of the new kitchens are washed in French water-colors (never in oil), but old-fashioned whitewash is as brilliant as anything, besides being a most excellent disinfectant.



METHOD OF THE FUTURE—COOKING AT TABLE BY ELECTRICITY.



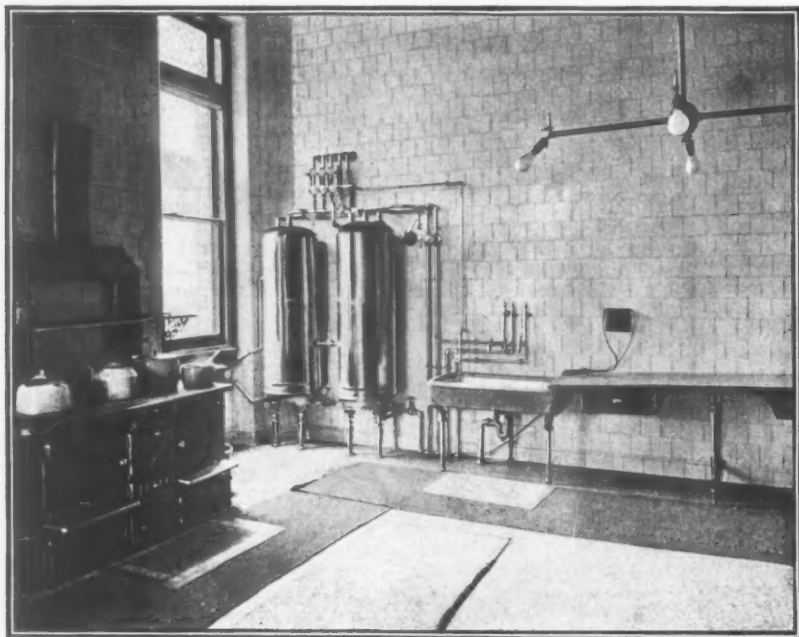
DISH-WARMING CLOSET IN RESIDENCE MR. J. J. M'COMB.

In the early days of the renaissance of the kitchen, some architects placed it at the top of the house, that the odors might pass away without permeating the other apartments. This was speedily discovered to be a mistake, not only on account of its inconvenience,

but because the passage through the house of supplies and refuse was as bad as the original trouble. Then new plans were made for ventilation.

The system of kitchen ventilation is constructed quite separate from the rest of the house or apartment. Over the range is placed a large hood, as low as it is convenient for the cook to work under. At the top of the hood, inside, is placed a large register with movable louvers; another at the level of the top of the range, and a third just above the base-board. The best theory is to connect these with a ventilating duct and force the air out by means of electric fans. But a round tile pipe placed inside the chimney answers every purpose. The registers are connected with this, and the hot air forces the air from the kitchen up and out. Some of the new houses have been put in plenum, keeping the air in the entire house under constant pressure by means of electric fans. By this means air is brought in, rendered dustless by contact with water, heated through coils of steam and carried through the house. Naturally all gases and odors are pushed out at the nearest exit.

This is most desirable, but beyond the means of the ordinary house-builder.



KITCHEN IN RESIDENCE MR. J. J. M'COMB, DOBBS FERRY, N. Y., SHOWING ELECTRIC WATER-SWITCH.



KITCHEN IN MRS. BURTON HARRISON'S CITY RESIDENCE.

The hood which carries off the odors is spoken of as a comparatively recent fixture, but it has been in use in some of the older countries for centuries. In Belgium it is

common to find a wide kitchen with a brick fireplace almost in the center, brooded over by a cavernous hood, around whose edges are hung gay tankards and cups, and sparkling copper utensils.

The new kitchen also has its glitter. The pipes are nickel-plate, and are fully exposed everywhere. When a grease-trap is used, it stands under the sink as important-looking as a silver vase. But the architects and plumbers dispute over the grease-trap. The architect insists upon a sink of enameled earthenware—not iron “porcelain-lined,” but earthenware. The high back of the sink is planted directly in the wall. The waste is trapped directly under the sink, and the trap is what is known as a half-S, or running trap, which should be not less than two inches inside.

The waste must be dropped directly down to the drain. This change of direction should be made with what is known as a three-way branch—one to take the waste-water to the iron waste-pipe, one to have a brass ferule and screw-cap, which may be removed for inspection and cleaning, the other to take the vent, which should pass directly up with a Y, one arm of which will serve for ventila-



BUTLER'S PANTRY, SHOWING KNIFE-POLISHER, IN RESIDENCE MR. J. J. MCCOMB.

tion, while the other is fitted with brass ferule and screw-cap. This avoids the necessity for the grease-traps, which are considered unpleasant in some instances.

The drain-board for the sink must be made of strips of maple, clamped together until they are water-tight. The cook's table should be of the same wood, and not of heavy porcelain, because the cook has never been discovered who likes a porcelain table. Marble, which dissolves in some of the acids and clogs with all kinds of oils, should never be used.

The modern kitchen has its accompaniment of side-rooms. Besides the store-room for dry groceries with its bins for barrels, its drawers for boxes, and its glass cupboards for jars and bottles,



MODEL SINK IN RESIDENCE MR. ROBERT GRAVES, IRVINGTON-ON-HUDSON.

there are the refrigerator for meat and the refrigerator for milk, with a quite separate compartment for fruit and vegetables. The milk and vegetable compartments are lined and shelved with heavy glass.

When artificial refrigeration is used, the coils of pipe are let in at the top, and they are provided with drip-pans. When ice is used, it is put in an entirely separate chamber. All the hooks in the refrigerator are heavily tinned.

When we come to the kitchen utensils, we discover a field all by itself. The room for their proper disposal must be large in one of the scientific kitchens, for the number is given as nearing three hundred. It is interesting to hear the law expounded in different quarters. The architect, anxious for effects in his model kitchen, insists upon copper utensils, and, with pictures of the Belgian kitchens in his mind, says that a clean cook will delight in seeing pots and kettles hung in a row near the range to reflect her reputation. One of the best-known lecturers upon cooking, a woman of practical experience, laughs at copper, and advises one of the enameled ironwares. In the Paris and some of the American shops are sold sets of kitchen utensils which are so beautiful to look at that they tempt the eye. A brass or nickel rod, with upright posts ready to screw to the ends of a table, is hung with a set of kitchen utensils in polished copper or in blue



COLD-STORAGE CLOSET IN RESIDENCE DR. WARNER.

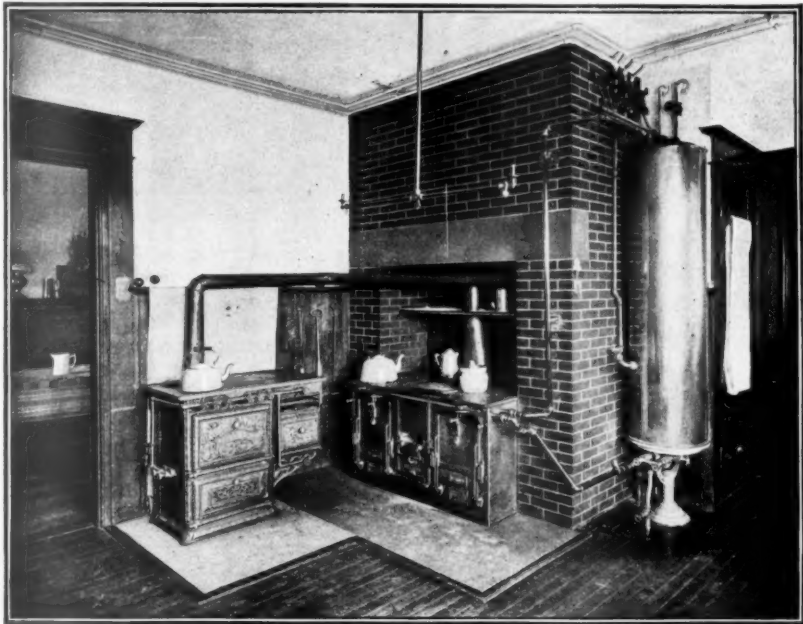
enamel. These are to hang always within reach of the cook's hand, and are a picturesque feature against the glittering white walls.

The hot-water tank is put into a room of its own, that its heat may not affect the temperature of the kitchen. When a gas-range is used, the hot-water tank has a heater of its own.

The butler's pantry might also be called a part of the kitchen. Here are the linen closet, and the strong steel safe built into the wall for the safety of the silver. A slide opens from the kitchen, through

almost equal to that with which it comes direct from the fire. By means of an automatic switch the temperature is kept at exactly the right degree—no more, no less. There are no coils of pipe for dust collection, or possible gas leakage, but solid steel walls.

Many of these appliances are possible only in the homes of the rich, but with the cheapening of electrical power will come many innovations in the more modest houses—where, on account of the fewer servants kept, they are most needed. But the domestic uses of electricity is a wide subject in itself.



COAL- AND GAS-RANGES IN RESIDENCE DR. CARROLL DUNHAM, IRVINGTON-ON-HUDSON.

which the dishes may be passed. The butler's pantry, in many houses, is lined by the china closets with glass doors, the drawers for the linen being below. In the butler's pantry stands the plate-warmer. This has been, until very recently, heated by hot-water pipes in the lower compartment for use in the winter, and by gas in the upper for summer. But in nearly every one of the elaborate kitchens the plate-warmer is now heated by electricity.

When this is possible, it will be found that the electrical box gives a zest to food

In almost all well-appointed houses there are two ranges, one for coal and the other for gas. They are of French wrought-steel, and preferably not bricked in. In many of the smaller houses and apartments there is only the gas-range. In this case the kitchen must be heated after the fashion of the rest of the house, and a separate heater added for the water-tank.

Every foot of space must be utilized. It is a stern rule of the architect that no laundry work shall be done in a cooking-



COAL- AND GAS-RANGES IN RESIDENCE DR. WARNER.

room, and yet it is a rule that he makes to break every month in the year.

Some of the tubs which are put in are ornaments in themselves, being of ivory English porcelain. The covers for them are of maple similar to the work-table. The plumbing is all open, leaving not one spot where dust may cling or hide.

The electric range is the particular boon of the small apartment.

It is made of soapstone or of the heavy earthenware, solid or built of tiles, for it consists only of a series of shelves, with the points of attachment to the current let into the back. It is so simple that a child can manage it, and, like the plate-warmer, every saucepan and cover can be regulated automatically.

Electricity is making its way into the kitchen through the parlor and dining-room. For some time it has been used for the heating of the five o'clock tea-kettle, eliminating the dangers which are always incurred when an alcohol lamp is used. A tea-kettle, coffee-pot or chafing-dish may be adjusted to the nearest lamp in a house wired for electric lighting.

The experienced cook knows that there are dishes which are never seen in their perfection ten feet from the fire that cooked

them. People who have passed their youth in the country grow peevish over the way years have deteriorated the flavor of some simple early favorite of the table. Electrical appliances have done something to bring back the old conditions. Griddle-cakes baked on a steel griddle, electrically heated to the exact temperature, lightly brushed with oil, are a crisp delight as they are flipped from griddle to plate. But while this appliance can be used with the illuminating current, it requires an extra attachment, as that current is too weak. This is generally put in at the leg of the dining-table. Up to this time electricity has been used almost exclusively by the woman who makes a fad of experimental cooking, and she has her electric kitchen fitted up like a small laboratory, far from the domain of the family cuisine.

The whole paraphernalia might fit into a tiled closet almost anywhere, so hooded and ventilated that no odor escapes into the surrounding rooms. In one of the apartment-houses in New York, dainty little electric kitchens have been fitted up where the tenants have asked for them, although the apartments were not designed for housekeeping originally.

Tiled walls and trazzazo floors are among

the impossibilities to the owner of the average kitchen the country over, and so are insulated store-rooms and automatic ovens. But she has a compensation for which the city woman would give much. This is open air and sunshine. Our grandmothers knew little of the germ theory, yet no sterilized milk can be sweeter than that set away in a "crock" which has been scalded and set in the blazing sun for a day. The walls of a kitchen whose windows are wide, and open out to wide spaces, are as healthful with a fresh coat of lime whitewash as though they were tiled; and a floor as tight as a boat, on whose boards the sun may rest for the most of the day, is harboring few plague-spots.

They do not need to be put in plenum, for nature moves the air through if she is given the chance. It is the chance, that a knowledge of domestic science gives her. Sunshine, fresh air, cleanliness, are the priceless things. There is no such disinfectant as the sun. A country kitchen whose walls are freshly washed, and whose closets are fragrant, need have no longing for the costly apparatus to fight what does not exist for it.

Every stove or range should have a



BOILER-ROOM, ADJOINING KITCHEN, IN RESIDENCE DR. WARNER.

hood. That is one of the essentials anywhere. And wherever there is plumbing it should be open and dustless.

Upon the cook of a household depends much, not only of the family's health, but of its temper, and its capacity for ready judg-



PROVISION-CLOSETS AND REFRIGERATOR IN RESIDENCE MRS. BURTON HARRISON.

ment, and considerable of its presentment before the world. The kitchen should be one which makes her work easy and pleasant for her.

It should be not only sanitary, but comfortable. As women, learning day by day the importance of food, go more and more into their own kitchens, ready to give the finest of their intelligence to the study of nourishment, they work out its restoration to its proper place in the

discoveries and brilliant experiments before he learns the commonest rules, yet that is what has sometimes been expected of the kitchen chemist. In these days women are asking that their cooks shall have been educated, and where they take them without certified qualifications they see that the opportunity to acquire is given to them, and see too that they may perform their careful work without undue annoyances and trouble. In New York alone are dozens



KITCHEN IN RESIDENCE MR. K. B. CONGER, IRVINGTON-ON-HUDSON.

house. The first room in the first house was a kitchen, and every other room is its adjunct.

The servant problem is losing some of its horrors in this new method of domestic study. When the proper respect for the feeding of a house comes, an ignorant, untaught servant is not expected to be an expert in what is seen to be a delicate art. A chemist is not expected to make original

of cooking classes which are attended by cooks whose mistresses have paid for their lessons.

One of the most important of these lessons is the care of the new kitchen—how to prevent the wrong sort of chemistry going to work there. One of these beautiful rooms, these laboratories for the making of good food, is a sorry thing in incompetent hands.

MEN, WOMEN AND EVENTS.

DURING this month the earnest attention and hope of the world will be centered upon the Disarmament Congress which the Czar has called to meet at the Hague. Greeted, in the first instance, by the jeers and derision of those diplomats who had been trained in a school of cunning expediency and opportunism, the Czar's declaration has finally succeeded in arousing the broadest sympathies of the world. Even Tolstoy, the defender of Russian humanity against injustice, has been frowned upon by the world because of his failure to give instant and determined support to the Emperor's endeavor. None but the most paltry mind longer ascribes to the Czar anything but the highest motive; none but the most indifferent, hopeless, pessimistic, looks forward to the Disarmament Congress with other than expectation of at least some measure of success.

The most difficult problem the world has ever presented is not likely to be solved by a single session of any men, however well-intentioned; still less by a gathering of diplomats whose brains are teeming with endless schemes for the personal aggrandizement of their masters. Thus far there has not been even a suggestion of how the difficult undertaking of disarmament may be carried through. Every mind that has tried to wrestle with this question has ended only in securing a keener realization of the endless difficulties which will beset the prosecution of any plan, however ingenious. Nevertheless, from the free public discussion of the best thinkers of the world must come a solution of the difficulty; and the first

clue may be the outcome of the Hague meeting.

One thing is being made plain as the world progresses: that while endless schemes are proposed as tending to the increased happiness of mankind, but few can be carried into execution at one time. Therefore it becomes the duty of every man who thinks seriously to give his enthusiastic support to any noble impulse from the heart of a man who plays so important a part in the destinies of the world as does the Czar.



NICHOLAS II., CZAR OF RUSSIA.

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Not so many years ago, to a friend talking to him about the future, Theodore Roosevelt remarked: "1899? Why, in that year I shall be only a middle-aged literary man." 1899 has come. Mr. Roosevelt is yet not quite middle-aged, and rarely literary. He is Governor of New York state, and having a busy time of it. Meanwhile he is playing politics assiduously. He has come through the war and his fiery campaign of last fall to be that remarkable product of our times—a national figure. The national figure is the prominent

citizen of the village under a magnifying-glass. Just at this time Mr. Roosevelt's friends, and they number many men in all political parties—it is even whispered that it was the Democratic vote of New York which elected him last fall—are watching his career with very great interest and not a little anxiety. He has been, up to this time, that most desirable figure in political life, a well-intentioned and perfectly fearless man. Rather a crude thinker and a student of many unimportant problems, he

has seemingly neglected the most important—those of a social order. Strong of prejudice, but apparently desiring the right, he has been forgiven for his blunders almost as rapidly as they have been made.

A warm admirer, who is one of those who feel just a little anxiety about his future, recently said to him: "You are growing cautious and hesitating. Do not forget that you have made yourself what you are by ruining yourself. Over and over and over again you have ruined yourself entirely and completely, and each time it has presently been discovered that you have in some unaccountable way grown still stronger in the public estimation. You have no strength but your integrity. Once begin to be a politician in its strictest sense, as a schemer, a planner, a man who takes thought for his political future, and the public will drop away from you in disgust. Be fearless, straightforward, determined for the public interest and willing to incur the enmity of politicians when the good of the public is at stake, and there is no power in political combinations that can place you in retirement."

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"Great Problems in Organization" constitutes a series in which *THE COSMOPOLITAN* takes no little pride. There is next to nothing of literature on this subject. Great organizers have, as a rule, been too busy

to give their time or unwilling to tell what they know, while papers from men who have not had the experience are comparatively valueless.

THE COSMOPOLITAN has been fortunate in having busy men lay aside their work to give to the readers of this magazine the benefit of their long years of experience. The two busiest and most important officials of the present government are among those who have contributed to this series. Secretary Gage in his "United States

Treasury Department" gave to the public an article of marked value. Even more important is that in this number from Charles Emory Smith, Postmaster-General, who writes of the organization now under his charge, "the greatest business concern in the world," as he describes it.

Originally from Connecticut, Mr. Smith, after graduating from Union College, chose journalism for his profession, and Albany for the field of his first work; thus adding another

name to the list of Albany editors who have achieved a national reputation—Thurlow Weed, Daniel Manning and Daniel S. Lamont.

An orator of much force, and noted as an eloquent after-dinner speaker, Mr. Smith, after being editor of the Albany "Express," and later of the Albany "Journal," was invited to take charge of the Philadelphia "Press." President Harrison sent him as minister to Russia, and Presi-



Photograph by Rockwood.

THEODORE ROOSEVELT, GOVERNOR OF NEW YORK.

dent McKinley, in looking about for a thoroughly capable Postmaster-General to succeed Mr. Gary, selected him for that place, to the great satisfaction of those who desire to see the department ably administered.

* * *

"Through a leering, laughing crowd
Wanders a wonderful thing :
A girl with the grace of spring."

That was the way Justin Huntley McCarthy described his first sight, on the music-hall stage, of the woman who was to be his wife. Now, it is said, they are about to be divorced; more's the pity.

Certainly there is no more charming personality on the stage than Cissie Loftus. In appearance refined, delicate, sensitive-looking, yet thoroughly self-possessed, she immediately secures the sympathies of her audiences.

Cissie Loftus was the daughter of Marie Loftus, an English music-hall singer, who educated the girl in a convent with a view to keeping her away from the stage. The daughter proved to be so talented, however, that there was no such thing as keeping her off the stage; it was only a question of time until she should follow her mother's calling. And when she appeared, her success was immediate. Then Justin Huntley McCarthy, who, like his father, had been in Parliament, but who left politics to write plays and books, saw her

and gave her his heart. This was in 1894, and she was said to be at that time only sixteen. The marriage was much talked of in literary and theatrical London, and the talking has been resumed now that the news is out that the "girl with the grace of spring" is suing for divorce the man who celebrated her so affectionately.

* * *

James Creelman, who at this time (the close of the month of March) is writing descriptions of the fights of Mc-

Arthur's men in Manila, is probably the most experienced American war correspondent in active work. Present at the principal events of the conflict between China and Japan, then of the war between Turkey and Greece, he was finally shot down in the first day's fight at Santiago. Not to let his Manila record fall be-

hind that in Cuba, he had his horse shot from under him while watching one of the charges in the advance on Malolos.

Between times Creelman has kept an active eye upon the politics of Europe and the elements which endanger the prosperity of his own country. In the successful fight to prevent the issue of bonds at unnecessarily high rates of interest, Mr. Creelman had personal charge of affairs at Washington. In Europe he has had the faculty of obtaining audiences with the most distinguished personages from the Pope down. Sympathetic and rather magnetic in his



CISSIE LOFTUS.

bearing, he is quickly en rapport with whomsoever he desires to discuss weighty affairs with. Perhaps something of his magnetism is due to the fearlessness, the splendid courage, of the



MR. JAMES CREELMAN.

man, both physical and moral. He has the reputation among all who know him of being absolutely beyond the reach of money. At times when men might have paid him hundreds of thousands of dollars to prevent a course of action, he has been unapproachable; risking the enmities of the unjust without hesitation, and never because of personal interest swerving a hair's-breadth from his course of duty. Fond of adventure, he has at times indulged in what might be called journalistic by-play. At one time he has experienced the excitement of a balloon journey, at another he has put on one of Paul Boyton's rubber suits and floated down a great Western river with that navigator who has left his impress on the Mississippi almost as indelibly as De Soto.

Creelman is personally familiar not only with every leading man of this country, but with every statesman of Europe. He has formed his own estimate of their sincerity, of their greatness, of their littleness, and is able to reach an approximate estimate of the hidden motives which play so important a part in the policies of nations.

* * *

The marriage of Miss Fair to Mr. William K. Vanderbilt, Jr., brings together two great fortunes, each numbering many millions.

Love, for the rich heiress or suitor, usually involves some distressing difficulties. If the young woman be poor and the man rich, there is no possibility of his knowing that by artful deception she is not concealing her true feelings and per-

haps marrying him for his money. Likewise, if the young woman be wealthy and the man poor, she must, except under rare circumstances, be beset by doubts as to the motives which cause him to declare his love. A young woman of means is very apt to be left alone by the manlier class of men, who do not care to subject themselves to misconception. On the contrary, the fortune-hunter marks her as his victim, and plans a long campaign with scientifically arranged approaches.

In these facts we may find a reason for the uniting of the Fair and the Vanderbilt fortunes. Neither party had occasion to be influenced by money, and it is a reasonable hope that love and love alone actuated the marriage.

Being married, with an endless amount of money at the disposal of each, these young people we might hope would take a higher conception of their responsibilities than that which usually accompanies the possession of a great fortune. After all, mere buying of pictures, velvets and



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MRS. W. K. VANDERBILT, JR., NÉE FAIR.

horses, and the giving of dinners and yacht parties, is intolerably tame and insipid. After a little time, there must be a sameness about it that is calculated to tire a mind in the least active. It would be interesting if we should find this couple some day sitting down with a piece of foolscap paper between them and asking themselves: "How can a millionaire lead an intellectual life, and what amusements are worth while? what pursuits can be followed in such a way as to bring no discredit upon the pursuer?" Some day some clever man will write the story of the Don't Know Hows.

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One is constantly impressed in New York

and other great cities with the vast waste consequent upon our system of giving musical and dramatic exhibitions. Chicago has given to architecture and to the public an exhibition of what may be done in the way of a nearly perfect hall. The Auditorium seats five thousand people. One may take a seat in the front rows of the orchestra, then go half-way back, then



ELOISE MORGAN.

into the boxes, and finally to the utmost and rearmost row, and from every seat the acoustics and the view are almost perfect. It seems a shame, when five thousand people can so perfectly enjoy an entertainment, that our methods should permit great musical and dramatic performances to be



LIZZIE MACNICHOL.

by the production of high-grade music at a low price has been very great. While a number of novelties have been put on, some of them works never before done in English in this country, the management has found that the public prefers the standard operas to those of which it has no knowledge or of which it has not heard. For instance, "La Bohème," got a fine production in New York, but was heard by none but the musicians and students and the regular subscribers. When "Il Trovatore," "Lohengrin," "Faust," "Bohemian Girl," "Mariana," "Martha" and

rendered before a petty audience of five or eight hundred people. The whole idea is founded upon a wrong principle.

During the last two seasons New York has been given an object-lesson in what advantages the public might have if halls were built upon a proper principle. The Castle Square Opera Company has produced forty-one operas in English, ranging all the way from "Faust" and "Lohengrin" to "Pinafore" and "Wang."

The benefit done to the public at large



YVONNE DE TREVILLE.

others of the well-known operas were put on, the theater invariably was crowded. The general public did not take to the novelties, but it did want to hear the standard works.

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Lady Randolph Churchill maintains a very steady position before the public as an interesting personality. Just at this moment she is embarking upon the issue of a magazine which, so the press announces, is to have none but royal contributors, and which is to be sold at the price of five dollars per copy.

This work of Lady Churchill promises to be a very useful one. The condition of the English reading public is very curious. Millions of copies of "Tid-Bits," and other periodicals which to American eyes are strangely designed, are sold at a low price to the British public. The progress of the movement might be denominated



LADY RANDOLPH CHURCHILL.

as the period of the awakening. The theory is that the reading of these periodicals will create a demand for a higher class of literature. Cheap publications may, therefore, be considered as serving a useful purpose in the evolution of the lower classes of Great Britain. Lady Randolph Churchill purposes to attack the non-reading classes from the other direction. Supposedly there is a large number of people who read but little because the sur-

roundings of literature are rather democratic anyhow, "don't you know," but if they can be approached from the direction of the five-dollar magazine contributed to solely by royalty, there is every probability that great interest will be excited, and that having become regular readers of this periodical, they will eventually be developed in taste to the extent of taking an interest in a different class of literature.



N Intellectual Duel.—Prof. Harry Thurston Peck, of Columbia University, and Mrs. Charlotte Perkins Stetson may be regarded as occupying positions at opposite poles with reference to almost the entire subject of woman—her early training, higher education, sphere of usefulness and general development. Believing that it would be of interest to have the case stated from both standpoints, the editor of *THE COSMOPOLITAN* has secured from Mrs. Stetson her consent to answer Professor Peck.

Professor Peck's article will appear in the June issue, and Mrs. Stetson's in *THE COSMOPOLITAN* for July.



WIRELESS Telegraphy.—That event which is exciting the widest interest in the scientific world, is the success of Signor G. Marconi in telegraphing without wires. For a long time this idea has been entertained by scientists, based upon the discovery and experiments of Hertz. The many claims that were set up without any actual demonstration had made the public somewhat skeptical as to the ultimate outcome; but Marconi has demonstrated the matter beyond all question.

By means of specially devised instruments, he has succeeded in sending long messages from Dover to Boulogne across the English channel, a distance of thirty-two miles, without wires, and with perfect success, under all sorts of climatic conditions. His apparatus is simple, considered from the viewpoint of an electrician. His two machines are a transmitter and a receiver. The transmitter is operated by an ordinary telegraph key, the operator using the Morse code of dots and dashes. The only difference between the manipulation of the key in wireless telegraphy and wire telegraphy, is that when working without wires but about fifteen words a minute can be sent, while the only limit in the ordinary method is the capacity of the operator. Briefly described, the operation is something like this: The pressure of the key liberates a spark of long or short duration, as may be desired. That spark is transmitted by means of the ether waves, strikes the coherer or radio-conductor, which is a part of the receiving instrument; and the dots and dashes made by the key at the transmitting end are reproduced by the sounder or on a tape.

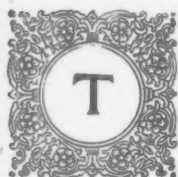
The system further involves the use of a vertical wire. Poles one hundred and fifty feet high were used in the Dover-Boulogne experiments. Marconi's own belief is that with a parity of other conditions, poles twenty feet high at the transmitter and receiver are sufficient for transmitting the message over a distance of one mile, forty feet high for thirty miles, eighty feet high for sixteen miles, and one hundred and fourteen feet for thirty-two miles. Added height of the vertical wire increases efficiency, and this is why the poles in the Dover-Boulogne experiments were one hundred and fifty feet high. Marconi says that poles are necessary when there are obstacles such as hills, mountains, or large masses of metallic substances intervening between the sending and receiving points; at all events, the results secured have been better.

It has been claimed that any man with a receiver could interrupt space telegraphy messages within a certain radius. This would, of course, make the system valueless, especially in military or naval operations. Marconi asserts he has a system of syntonizing, or tuning, which prevents messages reaching any but the receiver for which they are intended. In other words, he tunes the receiver to conform to the oscillation of the waves or sparks transmitted. Thus, by knowing the tune of the receiver and by altering the wave-length of the transmitter to conform, no other receiver in the radius could take the message unless it was syntonized to agree exactly with the first receiver.

The inventor worked in Italy for some years, and then came to England. Within the last year he has conducted some very remarkable experiments from Alum bay, Isle of Wight, Poole and South Cliff. He has had no difficulty in transmitting messages

eighteen and twenty miles. He reported the Kingstown regatta for the Dublin "Daily Express," and enabled that paper to beat all its rivals on the results. The receiver, in this instance, was placed on the shore and the transmitter was on a steamer following the yachts. The system was operated up to twenty-five miles, and of the seven hundred messages sent none had to be repeated. He also installed his instrument on the yacht of the Prince of Wales, when that eminent personage was suffering from the injury to his knee last summer, and sent daily messages to the Queen concerning the condition of her son. Marconi has a perfect system now working between the South Foreland lighthouse and a lightship twelve miles away.

The French government is taking an active interest in the system, and after the satisfactory experiment between Dover and Boulogne set on foot an inquiry to see what the cost would be. Marconi asserts a wireless telegraph message will cost far less than the ordinary cable message. In a recent address before the Institution of Electrical Engineers in London, Marconi said the Italian navy was using his system and had been for more than a year. Perfect communication had been held between warships at a distance of nineteen miles, although ten miles is ordinarily sufficient for all fleet requirements.



HE Moon Within Forty Miles.—The man in the moon, who came down too soon, as we are informed by that veracious astronomical chronicler, Mother Goose, is coming down again, practically, at the Paris Exposition, provided the great telescope now making is a success. The projectors of the enterprise assert they will bring the moon within forty miles by means of their apparatus, and it really begins to look as if there was a chance to do so, for the great seven-foot mirror is almost ready, and the lenses, after repeated failures, are ground and perfect.

The basis of comparison for a telescope is the object-glass, and the only lenses to which those of the Grande Lunette can be compared are those of the Yerkes telescope, at Lick Observatory, in California, and the gigantic Grünwald instrument that was shown at the Berlin Exposition. The Yerkes object-glass is three feet five inches in diameter, and the Grünwald glass measures three feet seven inches across. The object-glasses of the Grande Lunette are four feet in diameter. These are the largest object-glasses ever cast and ground successfully. The completed telescope will not be subjected to the restrictions imposed on the other big telescopes of the world by the difficulties of mechanical construction. That is to say, a telescope as large as the Yerkes, for instance, is mounted on a framework of complicated mechanism and held up by a tremendous foundation. The Yerkes, which fell once before it was finally placed, was restricted to sixty-five feet in length because of the mechanical difficulties in handling an instrument longer and heavier. That is not the full focal distance of its object-glass. The Yerkes telescope does not do what it might.

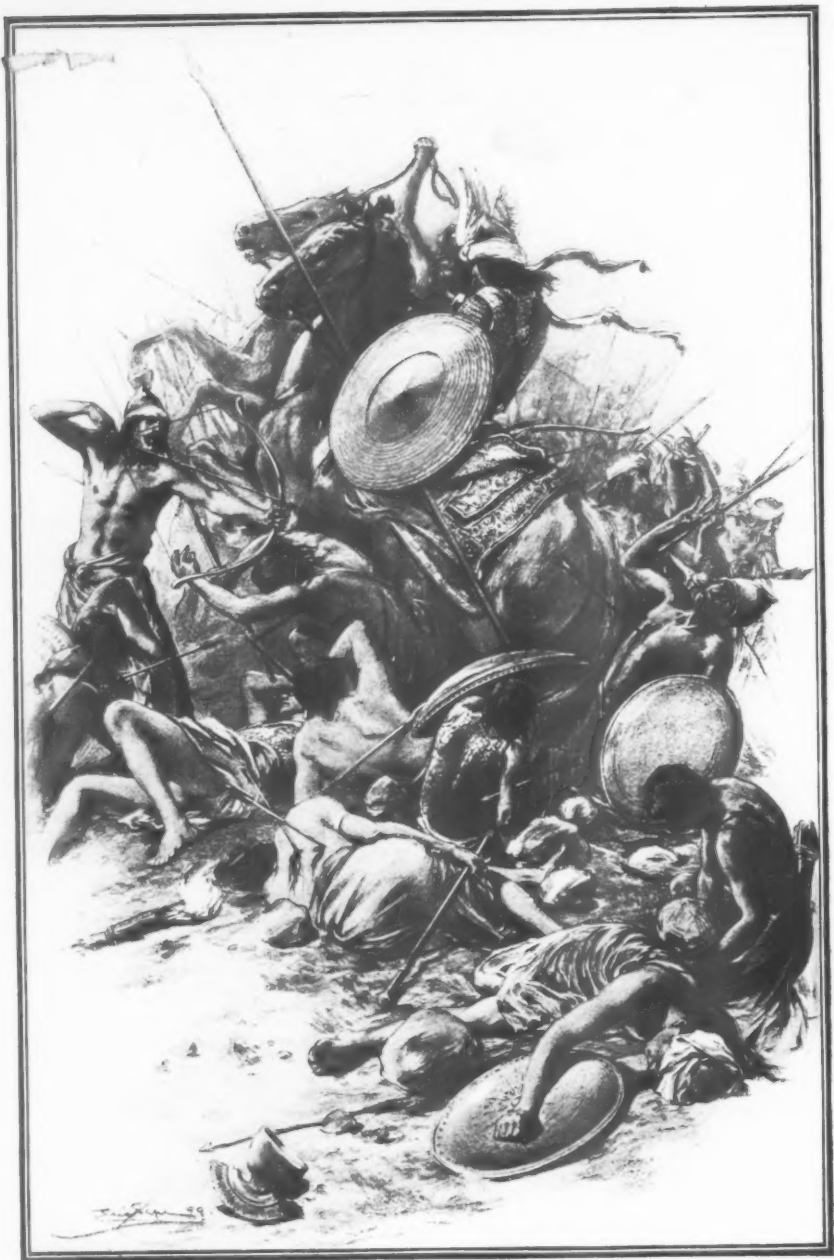
To circumvent the difficulty and give the four-foot object-glass of the Paris telescope its full focal power of one hundred and ninety-five feet, the telescope will lie flat along the ground. It will be stationary. The image of the star or other heavenly body to be examined will be caught by a seven-foot mirror, reflected on the object-glass and seen as perfectly as if the great glass were pointed at the sky. By ingenious mechanism at both the eye-piece and under the mirror, it will be possible to catch any part of the sky and retain the image on the glass, for the mirror and the eye-piece will do what the whole telescope does in other observatories—follow the rotary motion of the earth. The casting of the great mirror and lenses has been attended with much difficulty.

The French astronomers are all at sea as to what they will discover when they look through the big glass. There is no precedent. They think they will get the moon, relatively, within a distance of forty miles. They are sure new and marvelous things will be discovered, but until the first man takes the first peep, no one can even guess satisfactorily.

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June - 9.9



Drawn by Eric Pape.

"DERAR HIMSELF SLEW FOUR HORSEMEN AND SIX FOOT-SOLDIERS."

(See "The Building of an Empire.")